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AGRA: THE CHÎNÎ-KA-RAUZA OCTAGONAL TOWER FACING THE JUMNA.
NORTH WEST CORNER OF THE GROUNDS AROUND THE TOMB.

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ARCHÆOLOGICAL SURVEY OF INDIA

MOGHUL COLOUR DECORATION

OF

AGRA:

DESCRIBED AND ILLUSTRATED

BY

EDMUND W. SMITH, M.R.A.S.,

ARCHÆOLOGICAL SURVEYOR, NORTH-WESTERN PROVINCES AND OUDH.

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THE MOGHUL COLOUR DECORATION OF AGRA.

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PREFACE.

ON completing the Survey of Akbar's city at Faṭhpur Sîkri, the writer commenced, by order of Government, that of the Chînî-kâ-Rauza, Agra, a tomb ascribed to Afzal Khân, a poet, who died in Lahore in A.D. 1639.

The mausoleum is one of the most interesting buildings in Agra, yet it is little known. It stands on the left bank of the Jumnâ, midway between Îtimad-ud-daula's tomb and Râm Bâgh, the garden, where according to tradition the body of Bâbar rested till conveyed to Kâbul for burial. The structure measures 79′-0″ square. Inside is an octagonal chamber 27′-10″ in diameter and 37′-0″ high covered by a dome exquisitely painted on the inside with floral patterns in rich colours.

Below the building is a crypt the walls of which were at one time coated with glazed tiles. The edifice is built of brick and the whole of the exterior is faced with glazed tiles commonly called chînâ, worked up into numerous patterns. It is from this circumstance that it derives its name Chînî-kâ-Rauza, or "the tomb (coated) with chînâ." Of its kind the mausoleum is unique, being about the only building in Northern India entirely ornamented exteriorly with enamelled tiles.

The greater part of the south façade has fallen disclosing the fact that the half domes over the vestibules in the centre of the façades leading into the cenotaph chamber are constructed, like many of the ancient dome buildings in Egypt and Rome, of large earthen pots embedded in concrete.

For many years the building was neglected and the *zamîndâr* (farmer) cultivating the adjacent fields lived in it and irreparably spoilt most of the painted decorations on the walls and ceilings by lighting fires in the rooms for cooking purposes. He has been evicted, and the Government, North-Western Provinces and Oudh, has now taken charge of the tomb and repaired it sufficiently to prevent it falling into further decay. Most of the mosaic designs in tiles on the outside, as well as the mural paintings, on the inside of the building, have been copied and are exhibited in the present volume, together with photographs of the tomb and some of the buildings of interest adjoining it.

Specimens of the mosaic tiling used by Jahângîr on the kiosks round the upper floor of his father's tomb at Sikandra are also presented along with photographs of the style of decoration employed in the entrance gateway to the grounds surrounding the tomb, and the variegated marble embellishment on the walls of Îtimad-ud-daulah's shrine, Agra. Time did not permit of coloured details being made of this ornamentation, but it is hoped at some future period they will be prepared and published in a separate volume along with illustrations of the style of colour decoration used in the Tâj, the Fort, and other Moghul buildings.

The line drawings and photographs have been ably reproduced in the office of the Assistant Surveyor General, Calcutta, and the coloured plates by Messrs. W. Griggs & Son, London, from originals prepared by the writer and his staff of assistants.

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The writer's thanks are due to Dr. James Burgess, C.I.E., late Director-General of the Archæological Department, for kindly reading through and examining the proof-sheets of the letter-press, printed at the Government Press, Allahabad.

EDMD. W. SMITH.

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September 1899.

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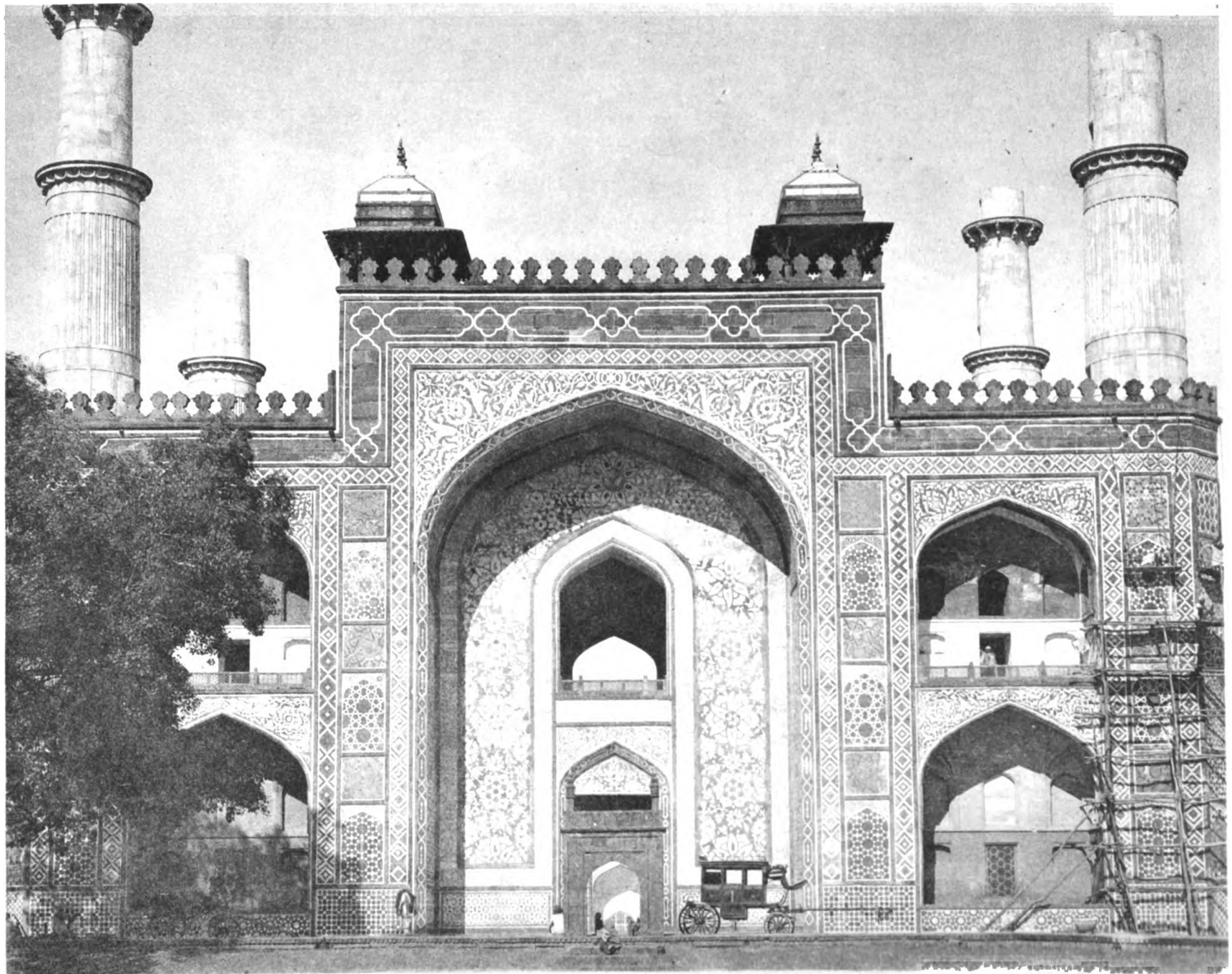

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SIKANDRA: AGRA. ENTRANCE GATE TO THE GROUNDS AROUND AKBAR'S TOMB, FROM THE SOUTH

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REPORT
OF
THE ARCHÆOLOGICAL SURVEY OF INDIA.

THE MOGHUL COLOUR DECORATION OF AGRA.

ILLUSTRATED BY EXAMPLES FROM THE CHÎNÎ-KÂ-RAUZA, THE KÂÑCH MAHÂL AND AKBAR'S TOMB.

CHAPTER I.

PRINCIPAL STYLES OF COLOUR DECORATION USED IN MOGHUL ARCHITECTURE.

The Moghul style of architecture,[1] which sprang up about the year A.D. 1556, under Akbar the Great, terminated about the year A.D. 1658. The style may be divided broadly into two main schools. Classified under the first, are the buildings erected by Akbar and Jahângîr between the years A.D. 1556 and 1630; and under the second, those built by Shâh Jahân between the years A.D. 1640 and 1658. The power of the Moghul empire reached its zenith under the fanatical Aurangzîb, the last of the Great Moghuls, but the style associated with the name of the Moghuls declined rapidly and steadily under his sway. Although many fine buildings were erected during Aurangzîb's reign, he has left no grand buildings, in the proper sense of the word, such as the palaces at Faṭhpûr Sîkrî; Îtimâd-ud-daula's tomb and the Tâj at Âgrâ, erected by his predecessors. Aurangzîb added to the palaces at Delhi, and built the mosque on the banks of the Ganges at Benares, besides also erecting palatial residences at Delhi, which are now either in ruins or are used for mercantile purposes. But none of his buildings can compare with the stately and majestic edifices erected by Akbar, Jahângîr and Shâh Jahân, which to this day excite the admiration of the world.

Between Akbar's buildings and those of his son Jahângîr there is, as a rule, but slight difference, and in the absence of documentary evidence and inscriptions it is difficult to determine to which reign a work belongs; but between their buildings and those of Shâh Jahân there is a most marked and decided difference, which even the uninitiated cannot but observe.

Akbar's and Jahângîr's works are strongly infused with Hindû architecture. Timber is almost unused, and the arch sparingly so; but under Shâh Jahân the Hindû element becomes less and less prominent till it gradually fades away. The Hindû bracket and flat architrave used over the apertures of doorways and windows makes way for the Muhammadan arch, and the beautiful carved geometrical decoration in red sandstone, as found at Faṭhpûr Sîkrî, and the Jahângîr Mahâl in the Fort at Âgrâ, gives place to mosaic in *pietra-durâ*, as exemplified in Îtimâd-ad-daula's tomb and the Tâj.

[1] In the preparation of this chapter Fergusson's *History of Indian Architecture* and Keene's "Note on Hindûstani Architecture" in his *Hand-Book on Agra* have been consulted.

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The stately buildings erected during Akbar's reign are not entirely devoid of colour ornamentation, and some of the Faṭhpûr Sîkrî buildings erected towards the end of Akbar's rule were richly decorated with frescoes. Marble mosaic was also used, notably in the Jâmî Masjid, one of the finest mosques in India. Even prior to Akbar's time we find the Pathân builders relying on white marble to enliven the severeness of their façades, but it was not till the reign of Shâh Jahân that coloured inlaid ornamentation became a leading characteristic of the style. Jahângîr relied more on mosaic decoration for beautifying his buildings than Akbar, and an example of this is seen in the gateway (Plate I) leading to the garden surrounding his father's tomb at Sikandra. A little later than the completion of Akbar's mausoleum, which was commenced by Akbar himself, but finished between A.D. 1605 and 1615 by Jahângîr, we find a new element being introduced, along with the variegated marble mosaic, in the shape of inlaid designs in coloured stones, known as *pietra-dura*, or "inlay." In Îtimâd-ad-daula's tomb we see both systems employed; but in the Tâj, Âgrâ, and the palaces at Delhi, erected between A.D. 1628 and 1668, inlay is almost exclusively used and is the characteristic feature of the style.

Besides marble mosaic, and *pietra-dura* inlaid ornamentation, the Moghuls relied to some extent, as did the Pathâns before them, on enamelled tiling for the enrichment of their buildings. It had been employed from an early period by the Persians upon their structures and came into use in India about Sher Shâh's time.

Akbar used encaustic tiling upon the stately palaces at Faṭhpûr Sîkrî for roofing purposes and for enriching architraves and borders round doorways, &c., and Jahângîr also used it for covering the domed kiosks (Plates LVIII to LXIII) round the third story of his father's mausoleum at Sikandra; and in the Kâñch Mahâl (Plates LXXXIII and XC).

In these and other buildings it was sparingly used, but in the mosque erected at Lahor by Jahângîr's Vizîr, and the Chînî-kâ-Rauza, Âgrâ (Plate VI), built it is supposed in Aurangzîb's reign, we find the walls, as in many Persian buildings, covered throughout with encaustic tiling. This style of decoration is called Kashâni after Kâshân in Persia, one of the chief seats of earthenware manufacture.

In addition to the styles of decoration briefly mentioned above, fresco paintings were extensively employed by the Moghuls for decorative purposes, and in many of their buildings, commencing with Akbar's time and downwards, we find frescoes used frequently upon the interior walls of their palaces and tombs.

Few Moghul buildings appear to have been entirely covered with enamelled tiling, and about the only one in Northern India is the Chînî-kâ-Rauza at Âgrâ, on the left bank of the Jamnâ between Îtimâd-ad-daula's tomb and Râm Bâgh, the garden where, according to tradition, Bâbar's body rested till conveyed to Kâbul for burial. The difficulties connected with the manufacture of enamelled tiles probably accounts for their being so sparingly used. Red sandstone was easily procurable and could be obtained in any quantity from quarries just outside Faṭhpûr Sîkrî, whilst marble could be imported from the neighbourhood of Jaypur. The manufacture of glazed tiles was no doubt introduced into India from Persia: it was not indigenous to the country and the art has almost died out, although it is carried on to some extent at Peshawar in the Punjâb.

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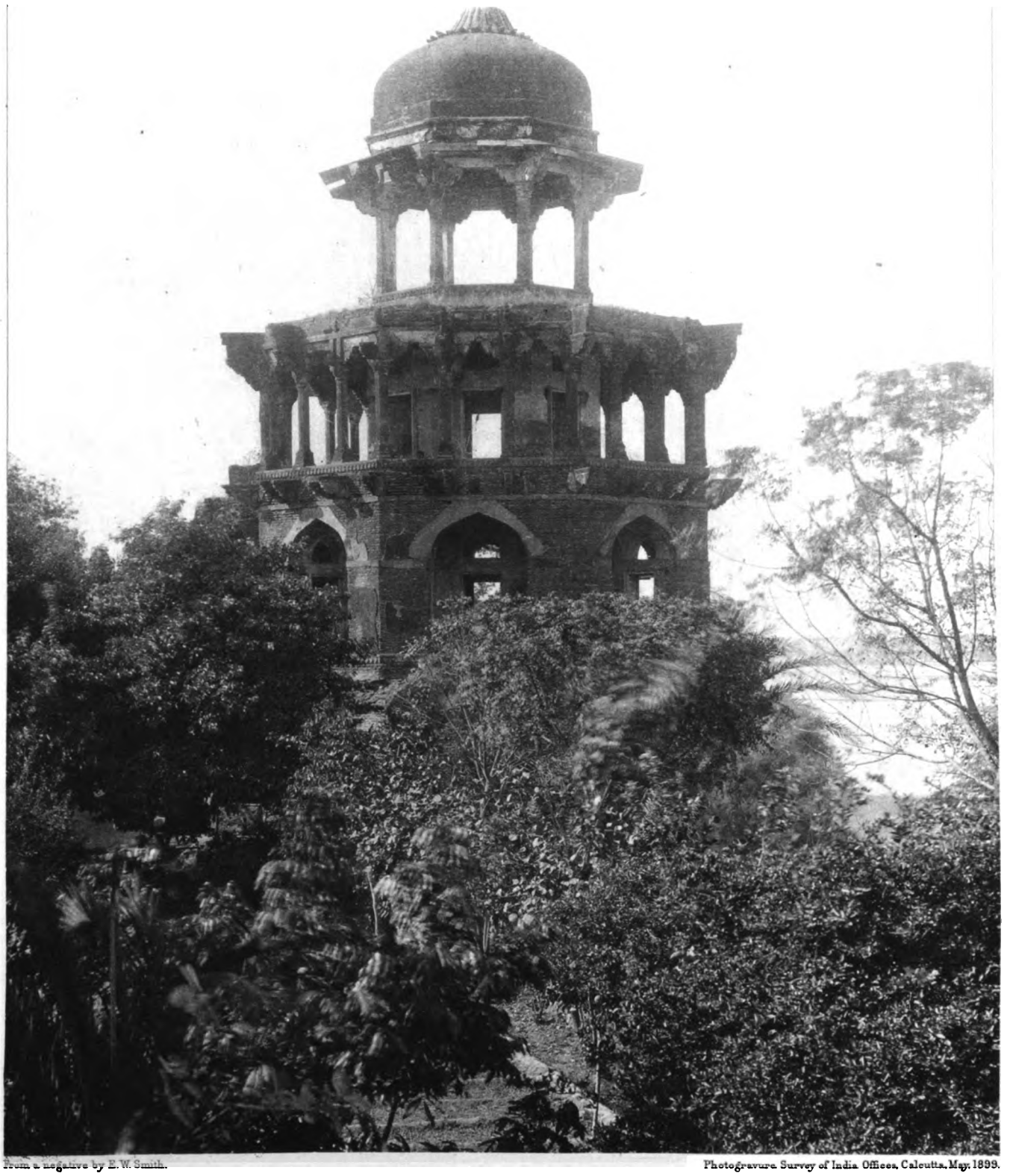

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AGRA: THE BATTIS KHAMBHÂ ON THE BANKS OF THE JUMNA.

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AGRA: ZÂHRÂ BÂGH. OCTAGONAL TOWER FACING THE JUMNA.

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CHAPTER II.

THE CHÎNÎ-KÂ-RAUZA.

Both banks of the Jamnâ on which the city of Âgrâ stands are studded with interesting buildings and gardens. Amongst those on the right bank are the Fort and the world-renowned Tâj, whilst on the left we have, besides Îtimâd-ad-daula's well-known mausoleum, several places of interest some of which are almost unknown even to the residents of Âgrâ. Amongst them, high up on the banks of the river, are the Baland Bâgh, the Sât Kûiya, the Battîs Khambha, the Ârâm Bâgh and the Chînî-kâ-Rauza. The Baland Bâgh is a garden which belonged to Baland Khân, one of Jahângîr's eunuchs. The Sât Kûiya, is a great pile of masonry overhanging the river, consisting of seven wells, or lifts, by means of which water was obtained from the Jamnâ for the adjacent gardens. The Battîs Khambhâ (Plate II) is a tower rising from the sands of the Jamnâ five stories in height surrounded by arched galleries. On the fourth story of this building are twenty-four columns and crowning it and forming the fifth story is a cupola supported on eight slender shafts. Next to the Battîs Khambhâ is the Râm Bâgh, more properly called Ârâm Bâgh, the "garden of rest;" but this name was by some accounts given to it by the *Jâts*. The older name was Bâgh-i-Nûr-Afshân, from the name of a Musalmân lady, identified by some with Nûr Jahân, the queen of Jahângîr and the daughter of his minister Îtimâd-ad-daula, whose tomb stands a short distance lower down the Jamnâ (Plate LXVIII).

"The Râm Bâgh is a large walled garden with a raised stone terrace on the riverside. There are octagonal towers or bastions surmounted by pillared cupolas at each corner of the river face; underneath, or in the body of the terrace, are a set of vaulted chambers, opening on to a lower terrace, just on the water's edge; while above, or on the terrace, are two buildings, open *bâradarîs*, with chambers at each end and verandahs overlooking the river. By popular tradition the Râm Bâgh was the resting-place of Bâbar's body, from the time of his death at Âgrâ till it was conveyed to Kâbûl for burial; but it is generally believed that the garden was made by the Empress Nûr Jahân, who frequently resorted here with her handmaids."[1]

Adjoining the Râm Bâgh is another garden called Zâhara Bâgh, also known as Sâyyid-kâ-Bâgh, from the existence of a small unpretentious shrine of a Sâyyid built on the river wall, which has a frontage of some 1,234 feet including two towers (Plate III), demarking the boundary of the garden.

The Chînî-kâ-Rauza adjoins the Zâhara Bâgh, and the next building to it of any great importance is Îtimâd-ad-daula's well-known tomb, close by the bridge-of-boats leading to the right bank of the Jamnâ on which the city of Âgrâ stands.

The Chînî-kâ-Rauza, or the tomb covered with "china" (enamelled tiles), stands in what was a large garden, but is now a field. The garden was enclosed on the north, south and east sides by walls, but was open on the river front. Being a mausoleum, it is built facing north and south as all such in India are.

[1] Führer's *Monumental Antiquities and Inscriptions*, in the N.-W. P. and Oudh, being Vol. II of the New Series of the Reports of the Archæological Survey of India.

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Roughly speaking, the enclosure round the mausoleum measures 323′-0″ from north to south and 462′-0″ from east to west. At the north-west corner of the enclosure, commanding a fine view of the river, is a picturesque tower (Plate IV) crowned by a cupola, which, like the kiosks round Akbar's tomb at Sikandra, was originally coated on the outside with enamelled tiles. At one time no doubt there was a corresponding tower to this on the south-west corner of the garden. There is still a tower here, but it does not belong to the Chini-kâ-Rauza. It is without the enclosure and is of a different design to that on the north-west of the corner of the garden, which is three stories high and built of brick faced with stone, beautifully carved with geometrical and floral designs (see Plate V). The tower is in a very dilapidated state and a portion of the side facing the river has fallen. This is in a measure due to the brickwork, which is very bad and inferiorly built.

The Chini-kâ-Rauza faces the river (Plate VI), but stands some distance back from the bank, with which it appears to have been connected at one time by a *ghât* or quay. It is a rectangular building (see Plan, Plate VII) measuring exteriorly 79′-4″ × 79′-4″. Within is an octagonal chamber 27′-10″ in diameter and 37′-0″ in height, covered by a rich *stalactite* or honeycombed dome crowned by another or false one, resting on a sixteen-sided base, which rises considerably above the roof of the building (see Plates VI and X), and has been constructed solely for effect's sake and to lend importance to the design. To this we shall revert again later on. From the plan (Plate VII), it will be seen that four of the eight sides of the octagonal chamber are formed into pentagonal-shaped recesses. In the remaining four sides are doorways leading into four half-domed oblong-shaped vestibules measuring 28′-0″ by 16′-0″; one in the centre of each side of the building. The vestibules on the east and west sides have pentagonal-shaped ends, whilst those on the north and south fronts are square in plan. Each vestibule is entered from the outside, beneath a lofty and spacious archway 32′-0″ high. At the four corners of the mausoleum are square chambers measuring internally 12′-1″ each way covered by domes. They are entirely detached from the central octagonal chamber, but can be entered from the vestibules as well as from the outside of the building. Immediately above them (Plate VIII) are four other rooms, connected by narrow arched passages, 3′-0″ wide, encircling the upper part of the central octagonal chamber. Beneath the building is a crypt, access to which is gained through open archways on the west or river front (see Plates VI and X). In the crypt immediately beneath the octagonal chamber were the tombs of the person or persons in whose memory the mausoleum was erected.

The tombs in the central chamber on the ground floor (Plates VII and X) are not the actual graves, but cenotaphs only. They are built of brick coated with plaster, and are not the original monuments, which according to custom would have been of marble.

The only ingress to the upper floor is by means of a stone staircase on the south-east corner of the building (Plate IX), but at one time there were probably additional entrances in the other three corners of the building. The south-eastern staircase (see Plans, Plates VII and VIII) stops on the first floor by the angle-room on the south-east corner of the building, and is connected by a narrow arched passage with another staircase on the north side of the tomb, leading to the roof and the false dome (see

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Negative by Edmd. W. Smith. Photogravure-Survey of India Offices, Calcutta. June 1899.

AGRA: THE CHÎNÎ-KA-RAUZA. DETAIL OF UPPERMOST FLOOR OF THE OCTAGONAL TOWER FACING THE JUMNA, ON THE NORTH WEST CORNER OF THE GROUNDS AROUND THE TOMB.

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section, Plate X) which surmounts the octagonal cenotaph chamber in the centre of the building.

There is nothing striking about the design of the façades to call for special comment. The central portion of each façade breaks up above the main line of the parapet and beneath it is a large archway 32′-0″ high, enclosing the upper part of the vestibules or antechambers leading into the cenotaph chamber in the centre of the mausoleum. The archway (Plate XI) is built of brick in radiating courses and continues right down in one unbroken straight line (showing the lateness of the architecture), on to the carved capping of a red sandstone plinth round the base of the building. The faces of the abutments upon the sides of the arches are sunk slightly in the shape of long oblong panels, which continue up over the crown of the arches, and are enriched with quotations from the Qu'rân in Arabic in Tughrah characters. The characters are in blue upon a ground of white tiles (see Plate XII) enclosed by narrow floral borders in blue, yellow and green tiling. On the outer sides, the abutments are bordered by slender perpendicular shafts which extend from the ground to some distance above the roof. They are covered with crimson, orange and white tiles laid in a zig-zag pattern, reminding one of similar ornamentation peculiar to Norman architecture. The zig-zag courses are laid in alternate bands of white and orange edged with strips of crimson and are arranged to make the shaft appear as if it had five instead of three sides. At the four angles of the building are similar shafts or *guldistas*, and these are veneered with tiles in royal blue interspersed with narrow trefoil-shaped bands running in parallel rows horizontally across the shaft. Although so simple, the effect is pleasing and far more so than much of the tiled ornamentation upon other parts of the mausoleum. The shafts extend up to just below the cornice, where they stop, to reappear again as finials above the parapet, terminating in large flower-shaped capitals. Drawings of the shafts are given in detail on Plate XIV.

But to revert again to the large archways in front of the vestibules in the centre of the façades. The spandrils above the arches were overlaid with glazed tiling wrought into rich and beautiful scrolls, mainly in blue upon an orange ground. Unfortunately most of the pattern, with the exception of that portion given on Plate XV, has succumbed to the ravages of time.

Generally speaking, one façade is like the other in design, but the tiled patterns with which they are covered vary considerably. The greater portion of the south façade has fallen (see Plate VI), and along with it the south-west angle of the building, disclosing the fact that the semi-domes over the vestibules in the centre of the façades leading into the cenotaph chamber are constructed, like many of the ancient buildings in Egypt and Rome, of *chattis* or pots embedded in concrete. In the construction of the archways and vaults, as in the present day, brick centring was employed, and before its removal the *haunches* and *pockets* of the arches were filled in with concrete, intermingled with earthern pots and brought up to the level of the roof, which was then floated over with cement so as to form a flat even surface. The masonry became very firm and compact, and an idea of its solidity may be formed from examining the *débris* strewing the ground round the fallen portion of the building. Some of the pieces measure 15′-0″ × 9′-0″ × 2′-6″ and the embedded earthern pots are 3′-6″ in diameter and 4′-0″ deep. It will be readily understood that by this mode of construction the arches

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were relieved of excessive weight, and at the same time a great saving was effected on the cost of the building. The entire edifice is built of brickwork and as many as six courses go to the foot. Many of the bricks are only 7″ long 4½″ wide and ¾″ in thickness, but the mortar joints are thick.

Exteriorly the tomb is covered from top to bottom with mosaic in tiling in a variety of colours, worked up into numerous patterns, so as to form one unbroken flat surface. The interior is floated with stucco painted with rich and bright floral designs. The tomb is built, as before mentioned, high up on the banks of the river, upon an artificial platform constructed of vaults and arches. The west façade is supported on piers and archways built on the upper end of a *ghât*, or quay, partially hidden by *débris*, &c., which connected the tomb with the riverside. In the centre are three arched entrances leading into the crypt. Over the top of the archways, on a level with the floor of the *podium* or platform upon which the mausoleum stands, is a series of large stone brackets which originally supported an overhanging balcony connecting the north side of the building with the south, and afforded visitors and friends of the deceased in whose honour the tomb was built a resting place where they could sit in full view of the river and the scenery beyond.

The crypt, it is to be deplored, has been used for years as a cattle-shed by the *zamíndâr* or farmer ploughing the fields round the tomb, and the result is that very little vestige is left of the dadoes, which were of coloured tiling. Above the dadoes, the walls were plastered. The arches and piers forming the outer or western wall of the crypt have been repaired during recent years, and although now practically devoid of tiling, one surmises from the existence of a few small pieces of blue and yellow tiling over one of the archways they were formerly coated like the rest of the building with mosaic.

It is from the circumstance that the tomb was coated with glazed tiles that it derives its name C h î n î-k â-R a u z a. It has been stated by some that the glazed decoration upon the walls of the tomb is all in one piece, and that it was not laid in separate pieces like tiles, "but continuously, either in one connected sheet, or forming large entire sheets." A careful examination of the walls will dispel this opinion. The glazed patterns are made up of thousands of small pieces of tiles carefully embedded like mosaic into the face of the plaster covering the brickwork. Where portions of the tiling have fallen, the original position of each separate piece of tiling as it was embedded into the plaster can be distinctly traced. In examining the walls it is found that the various patterns the tiles were to assume were first traced upon the plaster when in a plastic state, after which the tiles were laid according to it. Probably in the first instance a full size drawing of the wall showing the patterns to be followed was prepared and the tiles were adjusted to it before being fixed on the walls, allowance being made for any shrinkage subsequent through burning. The joints between the different pieces of tiles are distinctly traceable (Plate XVI), and "are not mere shallow lines of demarcation between the coloured patterns," as has been asserted by a former explorer. This again shows "that the glazing is not in one connected sheet," but that it is a mosaic in tiles.

Fig. 5, Plate XIII, is a section through the front surface of the wall showing the tiling, &c. From the illustration it may be seen that the face of the brickwork was, in

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AGRA: THE CHÎNI KA-RAUZA. GENERAL VIEW FROM THE BANKS OF THE JUMNA.

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the first instance, overlaid with a coat of plaster 2″ in thickness, and upon this a finer coating an inch in thickness was floated, into which the tiles, $\frac{5}{8}$ of an inch thick were bedded.

One cannot definitely say of what substances the tiles are composed, but it is evident they are caustic, or tiles which have been subjected to an almost incandescent heat. The glazed surface is only the thickness of the blade of a knife. They have certainly been subjected to heat, and are not merely "made of mortar or cement enamelled over," as has been asserted by some people.

Plate XVII shows a piece of the wall from which the tiling has fallen and the former position of the tiles when they were embedded into the upper coating may be seen. Plate XVIII, a view of the north side of the east façade, also exemplifies this. The drawing of the pattern the tiles were to assume over the window and doorway beneath may be seen traced out on the face of the plaster.

A separate design made up of a number of patterns has been used for each of the façades, but the design on one-half of a façade corresponds to that, or almost so, on the other.

The present beauty of the building is spoilt to a great extent by the absence of the tiling round the top and bottom of the façades. This is owing partly to natural causes, and partly to the fact that for years past visitors have hacked off and carried away pieces of the tiling as mementos of the place.

The coloured illustrations showing the tiled patterns, with the exception of the Plates numbered from XXXIX to XLV, inclusive, are taken from the east side of the north façade and the south side of the east façade. The patterns on the west side of the north façade are almost the counterpart of those on the eastern side of the same façade: whilst the designs on the north side of the east façade are like those on the south side. The patterns on the east corner of the south front (Plate IX), the only portion of that side of the mausoleum which is standing, so closely resemble those on the north-east angle of the building that they have not been reproduced.

Two half-elevations of the tomb, one of the east and the other of the north façade, are presented on Plates XI and XXIV. From these the position of the patterns depicted in the coloured illustrations may be seen. In order that the designs may be easily recognized the plates are marked alphabetically and the letter assigned to each is given upon the skeleton elevation, showing the exact position from which the pattern it illustrates has been taken. Plates XII to XVII; XIX to XXIII and XXV to XXVII are from the east façade, and as they are drawn to a large scale they need little in the way of description. The principal colours employed are blues, greens, oranges, vermillions, lakes, &c. They are in a variety of delicate shades, which like the peculiar metallic lustre of the glazing, it is impossible to reproduce exactly on a drawing. The different hues have been matched as nearly as possible, and for all practical intents and purposes they are exact reproductions of the originals. It is impossible to describe the full effect of the tiling, there is that about it which baffles description, and to be fully appreciated it must be seen. A peculiarity about it is that the colours appear to change with the light, and what at one time is seen, say, as a dark blue, appears at another as quite a different shade of the same colour.

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Before examining the illustrations, it may be useful to direct attention to some extracts from Sir George Birdwood's *Industrial Arts of India* on the manufacture of Indian encaustic tiles and pottery. Most of the colours used in the manufacture of the Sind and Panjâb tiles are found upon the walls of the C h î n î-k â-R a u z a, and as far as one can judge the enamelling was prepared in the same way as these tiles.

"The glazed pottery of Sindh," says Sir G. Birdwood[1] "is made principally at Hala, Hyderabad, Tatta, and Jerruck, and that of the Panjâb at Lahore, Multân, Jang, Delhi and elsewhere. The chief places for the manufacture of encaustic tiles are at Bulri and Saidpur in Sindh. It is said that the invasion and conquest of China by Chingiz Khan, 1212, was the event that made known to the rest of Asia and Europe the art of glazing earthenware; but, in fact, the Saracens from the first used glazed tiles for covering walls, and roofs, and pavements, and of course with a view to decorative effect. The use of these tiles had come down to them in an unbroken tradition from the time of the "Temple of Seven Spheres," or Birs-i-Nimrud, at Borsippa, near Babylon, of the temple of Sakkara in Egypt, and of the early trade between China and Egypt, and China and Oman, and the valley of the Tigris and Euphrates. Diodorus, describing (after Ctesias) the circular wall of the royal palace at Babylon, says: "The whole portrayed a royal hunting scene, beautiful with divers coloured forms of men and beasts, baked in the clay, and much like unto nature . . . . There was Simiramis, killing a tiger, and by her side her husband Ninus, piercing his spear through a lion." Glazed tiles had, however, fallen into comparative disuse before the rise of the Saracens, and it was undoubtedly the conquests of Chingiz Khan, A.D. 1206-1227, which extended their general use throughout the nations of Islâm. The glazed pottery of the Panjâb and Sindh probably dates from this period, and, as we shall presently see, was directly influenced by the traditions surviving in Persia of the ancient civilisations of Nineveh and Babylon. It is found in the shape of drinking cups, and water bottles (cf. pot and Latin *poto*, I drink), jars, bowls, plates, and dishes of all shapes and sizes, and of tiles, pinnacles for the tops of domes, pierced windows, and other architectural accessories. In form, the bowls, and jars, and vases may be classified as egg-shaped, turband, melon, and onion-shaped, in the latter the point rising and widening out gracefully into the neck of a vase. They are glazed in turquoise, of the most perfect transparency, or in a rich dark purple, or dark green, or golden brown. Sometimes they are diapered all over by the *pâte-sur-pâte* method, with a conventional flower, the *seventi*, or lotus, of a lighter colour than the ground. Generally they are ornamented with the universal knop and flower pattern, in compartments formed all round the bowl, by spaces alternately left uncoloured and glazed in colour. Sometimes a wreath of the knop and flower pattern is simply painted round the bowl on a white ground.

"Mr. Drury Fortnum, in his report on the pottery at the International Exhibition of 1871, observes of the Sindh pottery: 'The turquoise blue painted on a paste beneath a glaze, which might have been unearthed in Egypt or Phœnicia—a small bottle painted in blue or white—is of the same blood and bone as the ancient wares of Thebes . . . . But the tiles are very important. . . . . They are in general character similar to, although not so carefully made as, the Oriental tiles known as Persian, which adorn the old mosques of Egypt, Syria, Turkey, and Persia . . . . The colours used upon them

[1] *Industrial Arts of India*, by Sir G. Birdwood, pages 304 *et seq.*

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are rich coppergreen, a golden brown, and dark and turquoise blue . . . . The antiquary, the artist, and the manufacturer will do well to study these wares. As in their silk and woollen fabrics, their metal work and other manufactures, an inherent feeling for and a power of producing harmony in the distribution of colour and in surface decoration exists amongst the Orientals, which we should study to imitate, if not copy. It is not for Europeans to establish schools of art, in a country the productions of whose remote districts are a school of art in themselves, far more capable of teaching than of being taught.'

"It is a rare pleasure to the eye to see in the polished corner of a native room one of these large turquoise blue sweetmeat jars on a fine Kirman rug of minium red ground, splashed with dark blue and yellow. But the sight of wonder is, when travelling over the plains of Persia or India, suddenly to come upon an encaustic-tiled mosque. It is coloured all over in yellow, green, blue, and other hues; and as a distant view of it is caught at sunrise, its stately domes and glittering minarets seem made of the purest gold, like glass, enamelled in azure and green, a fairy-like apparition of inexpressible grace and the most enchanting splendor.

"In giving the following receipts of the different preparations used in enamelling Sindh and Panjâb pottery, it is as well to say that they are of little practical value out of those countries. It will be noted that a great deal is thought, by the native manufacturers, to depend on the particular wood, or other fuel used, in the baking, which, if it really influences the result, makes all attempts at imitating local varieties of Indian pottery futile.

"In the glazing and colouring two preparations are of essential importance, namely *kanch*, literally glass, and *sikka*, oxides of lead. In the Panjâb the two kinds of *kanch* used are distinguished as *Angrezi kanchi*, 'English glaze,' and *desi-kanchi*, 'country glaze.'" * * * * *

The ornamental designs are either painted on off-hand, or a pattern is pricked out on paper, which is laid on the vessel and dusted with the powdered color along the prickings, thus giving a dotted outline of the design, which enables the potter to paint it in with all the greater freedom and dash. It is the vigorous drawing, and free, impulsive painting of this pottery which are among its attractions."[1] . . . . . .

"The enamelled pottery of Sindh and the Panjâb is a sumptuary and not a village art, and is probably not older than the time of Cenghiz Khan. In all the imperial Mogol cities of India where it is practised, especially in Lahor and Delhi, the tradition is that it was introduced from China, through Persia, by the Afghan Mongols through the influence of Tamerlane's Chinese wife; and it is stated by independent European authorities that the beginning of ornamenting the walls of mosques with coloured tiles in India was contemporary with the Mongol conquest of Persia. But in Persia the ancient art of glazing earthenware had come down in an almost unbroken tradition from the period of the greatness of Chaldæa and Assyria, and the name *Kasi*, by which the art is known in Persia and India, is probably the same Semitic word, *kas*, glass, by which it is known in Arabic and Hebrew, and carries us back direct to the manufacture of glass and enamels, for which the "great Zidon" was already famous 1500 years before Christ. The pillar of emerald in the temple of Melcarth, at Tyre, which Herodotus

[1] *Industrial Arts of India*, by Sir G. Birdwood, page 310.

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describes as shining brightly in the night, "can," observes Kenrich, "hardly have been anything else than a hollow cylinder of green glass, in which, as at Gades, a lamp burnt perpetually." The designs used for the decoration of this glazed pottery in Sindh and the Panjâb also go to prove how much it has been influenced by Persian examples, and the Persian tradition of the ancient art of Nineveh and Babylon. The "knop and flower" pattern, which we all know in Greek art as the "honeysuckle and palmette" pattern, appears in infinite variations on everything.

"The old glazed tiles to be seen in India are always from Mahommedan buildings, and they vary in style with the period to which the buildings on which they are found belong; from the plain turquoise blue tiles of the earlier Pathan period, A.D. 1193-1254, to the elaborately-designed and many-colored tiles of the latter part of the great Moghul period, A.D. 1556-1750. Wherever also the Mahommedans extended their dominion they would appear to have developed a local variety in these tiles. The India Museum has some remarkable examples of glazed tiles from the ruins of Gaur, the old Mahommedan capital of Bengal, which was erected into a separate kingdom almost simultaneously with Delhi itself. Mahommed Bakhtiar, the conqueror of Bihar, under Katub-ud-din, became, A.D. 1203, first king of the dynasty, which ruled there until the state was absorbed into Akbar's vast empire, A.D. 1573. But the city of Gaur was a famous capital of the Hindus long before it was taken possession of by the Mahommedans. The Sena and Bellala dynasties seem to have resided there, and no doubt, says Mr. Fergusson (*History of Indian Architecture*, pages 546 *et. seq.*) adorned it with temples and edifices worthy of their fame. Be this as it may, some of the oldest of the India Museum Gaur tiles are not of any style of Mahommedan glazed tiles known elsewhere in India, and have a marked Hindu character, quite distinct from the blue, and diapered and banded tiles which are distinctive of Mahommedan manufacture elsewhere in India, before the florid designs of the Mogol period came into vogue. It is quite possible therefore that enamelled pottery was made in India long anterior to the age of Cenghiz Khan. It would be well to examine any ruins about the Sena capital of Nuddea for old tiles to compare with those of Gaur. It is not at all improbable that in a country of brick architecture like Bengal, glazed bricks were used by the Buddhists and Hindus for ages before the Mahommedan conquest."[1]

Returning to the illustrations; Plate XIX presents a detail drawing of the parapet and frieze band round the top of the façades. Between the frieze and the parapet is a concave-shaped moulding, projecting 10″ in advance of the face of the parapet, which continues right round the façades, and breaks up over the large archways in front of the vestibules in the centre of the façades.

Plate XX shows a panel over a small window in the south end of the east front, lighting the room on the first floor in the south-west angle. It corresponds, and is the counterpart in design to the panel marked D on the elevation Plate XI. It is one of the largest panels in the building. Piercing the bottom of the panel is a window 1′-6″ wide by 2′-5″ in height. The window frame is in sandstone, surrounded by a white tiled border, studded with blue and crimson tiles with trefoil ends. The ground of the panel is of an ochre colour, and let in upon it are three flowering trees. One extends from the head of the window to the top of the panel, which, as the illustration shows

[1] *Industrial Arts of India*, by Sir G. Birdwood, page 320 *et seq.*

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is engrailed, and on each side of the window opening is a tree. The trunks and branches are represented in deep crimson, the leaves in light green, whilst the flowers are dipicted in different bright hues.

The joints of the tiles are shown on the drawing, and where tiles have fallen one can distinctly see, as in the case of the panel over the north window (Plate XVIII), that the patterns which the tiles were to assume were first traced out on the face of the plaster coating the walls and the tiles afterwards fitted to them.

Plate XXI represents the archway over the door on the ground floor leading into the room on the south-east angle of the building. It is marked K on the elevation Plate XI, and is one of the prettiest pieces of tiling in the building. The ground of the *tympanum* of the arch is a deep royal blue, and embedded in it and permeating throughout the field is a creeper in orange with white flowers. A striking but agreeable contrast to this is made in the spandrils of the arch, which are of orange inlaid with a delicate scroll looped together at intervals with blue rosettes. The tendrils are of a plum colour, the leaves green and the flowers, which remind one somewhat of a fuchsia, in blue, plum, &c. Merging from the tendrils in two or three places, and filling up the space between the scrolls are bunches of pomegranates. Enclosing the whole is a floral border in orange, green and white upon a blue ground edged with white and green tiling. The same or nearly the same border is found round all the panels throughout the façades. The tiling upon the lower portion of the archway has decayed, and where it has fallen, the plaster key into which it was bedded can be seen and behind it the brickwork, which in many cases, as before mentioned, runs as many as seven courses to the foot.

The next illustration, Plate XXII, shows two panels marked J on the elevation, immediately below the window lighting the first floor room on the east corner of the tomb; whilst Plate XXIII represents the narrower panels upon the sides of these. Plate XVI (H on the elevation) shows a panel on the north side of that given on Plate XXIII. It is one by itself and the design upon it is quite different to any of the others. It has been drawn to a larger scale than the other illustrations, in order that the joints between the different pieces of tile making up the design may be clearly seen, and to show that the enamelled surface of the walls "is not all in one piece," but is really a mosaic worked out in tiles. The ground of the panel in contradistinction to most of the others is of a plum colour and forms a striking contrast—they being all of brighter hues. As the illustration shows, the pattern is made up of a number of distinct and separate pieces of tiles. In keeping with most of the panels this one is engrailed at the top. Extending from the bottom to the crown of it is a stiff straight stem in orange; and branching out from it and bending over in curved lines towards the sides of the panel are minor stems terminating in flower ends. Like all the other designs, the flowers are conventionalized and it is impossible to say what they represent. Generally speaking, the flowers are not shown in perspective, but in some cases the turn-over ends of the leaves are represented in one colour and the *calyxes* in another. In the example before us the leaves resemble the acanthus. They are in ochre and green, and no attempt of shading is made The *calyxes* of the flowers are in green and the turn-over sides of the leaves are shown in ochre, the undersides being represented by orange. In all cases the main stems of the plants are shown

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springing from the ground, which is depicted in various colours and generally in the form of a segment.

The three panels shown on Plate XXV are from the south side of the large central panel lettered D on the elevation, and those shown on Plate XXVI are immediately below them, whilst the two panels represented on Plate XXVII are from the north side of the panel marked D.

The remaining plates dealing with the exterior decoration of the mausoleum, with the exception of a few from the west, or river façade, are taken from the north front. These should be studied along with Plate XXIV, which is a half elevation of the north side of the building. As in the case of the previous plates illustrating the tiling on the east front, the panels are lettered alphabetically and the corresponding letter is given on the elevation so that the positions the panels occupy on the building may be easily recognized.

As the rooms on the first floor are adequately lighted from the east, the architect did not deem it necessary to construct windows towards the south, but he marked the position they would have occupied by blind windows placed over the doorways on the ground floor. One of these windows is shown on Plate XXVIII. Over what would have been the aperture of the window is a tiled lattice designed after a Chinese model 1′-7″ in width by 2′-4″ in height, surrounded by a border corresponding to that round the windows lighting the angle-rooms looking towards the east and which are shown on Plate XX. The pattern of the lattice resembles those used for filling up the wall recesses in the K h w â b g a h at F a ṭ h p u r S î k r î—the small unpretentious apartment in which Akbar was wont to spend most of his time when at his summer capital. Similar designs are met with in Chinese work, and it is not impossible that some of the workmen employed on the decoration of the C h î n î-k â-R a u z a came from China or Japan, or more probably the designs travelled from China into Persia and from thence to India. The pattern is composed entirely of straight bars placed at right angles to each other so as to form a number of square and oblong spaces which are alternately filled in with white and red tiles, the divisional bars being in blue. Up the centre of the panel is a bar corresponding with the *meeting rail* of a casement window and its face is ornamented with V shaped tiles laid alternately in green and yellow courses. Surrounding the lattice is a field of green tiles, inlaid with conventionally treated flowers in various bright colours. The field is edged with very narrow blue tiles, worked into the shape of an arch over the top of the lattice. Enclosing this again is a rectangular frame in very narrow blue tiles, and the spandril pieces between it and the arch are laid with dark gamboge tiles set in which are delicate floral scrolls, the colours harmonizing with the flowers surrounding the lattice within.

Plate XXIX shows the panels marked E on the north elevation, below and over the blind window just described. The designs of the flowers are more realistic than many of the others. The pattern upon the upper of the two panels may be intended for a lily, whilst that upon the lower was probably meant to represent a passion flower. It should be mentioned that in this instance the flowers are shown to some extent in perspective by representing the petals in different colours. In both panels a dark background has been employed, and this forms a pleasing contrast to the bright ground invariably used.

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The two panels illustrated on Plate XXX are between those shown on the preceding plate and the head of the doorway on the ground floor. They are marked B, B, on the elevation.

Plate XXXI represents four panels between the polygonal shaft at the corner of the building and the doorway leading into the ground-floor corner-room. They are lettered A, A, on the skeleton elevation, Plate XXIV, and like the eight panels depicted on Plates XXXII and XXXIII, they are much narrower than the panels on the west of the doorway, though of the same height. The extra width of the western panels is accounted for by the fact that the doorway is not in the centre of the façade. It is placed as it should be in the centre of the room into which it leads, on the west side of which there may have been a staircase leading to the first floor. If the doorway had been placed in the middle of the exterior wall, it would have looked out of place as it would have been too close to the staircase and not in the centre of the room.

The patterns on the panels shown on Plates XXXI, XXXII and XXXIII, like those represented on Plate XXX, are more realistic than many of those portrayed on the other panels. They are not so stiff, and the leaves and flowers are disposed in graceful curves so as to leave no gaping spaces so detrimental to true design. In some instances white grounds have been introduced, and with a pleasing result. The two panels shown on the right of those depicted on Plate XXXII are very effective, notwithstanding the stiffness of the stems which reach in one straight line from the bottom almost to the top of the panels. The bell-like flowers in blue in the bottom of the panel bend over from the top of the stalk upon an orange ground. They look extremely well, and the effect is heightened by making the outer border in white.

The four panels shown on Plate XXXIII, and marked K on the elevation, are not so pleasing as those shown on Plates XXXI and XXXII. They are altogether stiffer and the colours do not harmonize so well. The tops of the two upper panels have decayed, and as the patterns are not traceable they could not be reproduced. Plates XXXIV, XXXV and XXXVI are from the west side of the blind window shown on Plate XXIV.

There were two other panels between those shown on Plate XXXIV and the frieze round the top of the building, a detail drawing of which was given on Plate XIX, but they have crumbled away or have been hacked off, like the panels round the bottom of the walls, by visitors wishing to carry away pieces of the tiling as mementos of the building. The panels shown on Plates XXXVII and XXXVIII, being out of reach, have so far escaped demolition, but there is nothing left of the patterns between them and the stone plinth round the base of the building.

The tiled panels on the north side of the tomb are in a better state of preservation than those on the other fronts, and, where they have fallen or have been destroyed, the patterns of the panels can generally be traced from the impression the tiles have left on the stucco into which they were embedded. This is more particularly the case upon the cornice.

On the west façade also the positions which the tiles occupied are very noticeable. Some of the patterns found on the other façades have been reproduced on the west side of the building intermingled with other designs. The most striking and interesting of these are presented on Plates XXXIX to XLIII, inclusive.

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The panels given on Plate XXXIX are immediately over the archway shown on Plate XLIII above the ground-floor door leading into the north-west corner room, and those represented on Plate XLI come between them and the bottom of a large panel round the window on the first floor, corresponding with that shown on Plate XX. The two panels shown on Plate XL are to the north of the doorway and impinge upon the polygonal shaft extending up the corners of the building from the ground to the roof, a detail drawing of which was given on Plate XIII. The panels shown on Plate XLII are taken from the sides, one from the north and the other from the south side of the large panel round the first floor window, and it will be noticed how entirely different they are from any of the other panels. In both instances yellow coloured vases upon a green background edged with an engrailed border in dark crimson occupy the place of the conventional plants found on the other panels, and in both cases an orange field has been used round the upper part of the panels. The vases are unlike in shape. In one case a broad short-necked vase has been used and in the other a *lota*[1]-shaped one. Protruding from the vases are flowers so disposed as to nicely fill up the field between the vase and the engrailed top of the panel.

The broad short-necked jar or vase stands in a flat white dish striped with yellow bands; the lip of the jar is of a dark crimson colour and its short neck is white. Round the neck and circling the shoulder of the vase is a collar of broad white leaves studded with blue flowers with red petals. The body of the vase from the bottom of the collar downwards is decorated with blue leaves. On each side of the vase is a double-handled water bottle (*surâhi*) in light vermillion with crescent-shaped bands of white stretching downwards from a narrow black band round the lower portion of the neck of the vase.

Similar vases and bottles are commonly used in the ornamentation on Jahângir and Shah Jahân's edifices, and they are frequently met with upon Îtimad-ud-daulah's tomb and most of the Âgrâ buildings of any note, but are seldom or ever find them upon the Moghul structures prior to Jahângir's time. They are found not only on tombs, but on domestic buildings as well.

The *lota*-shaped vase shown on the panel given at Fig. 1, Plate XLII, stands alone and is unsupported by the water bottle. White has been used for the neck, but instead of the collar of flowers and wreaths used upon the vessel presented at Fig. 2, Plate XLII to break up the orange coloured body, a horizontal band of blue quatrefoils between borders of dark crimson has been employed. The vase has two snake-shaped handles, but being coloured vermillion they can hardly be seen against the bright yellow and blue colouring of the vase.

Plate XXI represents the archway over the door on the ground floor of the east façade and Plate XLIII exemplifies the style of ornament upon that over the corresponding door on the west façade. In the former, blue tiling was used in the *tympanum* of the arch, and orange for the spandrils; whereas in this instance, as the drawing shows, ochre has been employed in the *tympanum* and white for the spandrils. The floral ornamentation both upon the *tympanum* and the spandrils is totally different from that upon the arch on the east façade represented on Plate XXI.

The entrance vestibules in the centre of the façades (see plan, Plate VII), though square in plan, are ceiled by semi-domes (see section, Plate X). The springing line of

[1] So named after the lota, a small metal pot used for drinking and ablution by Hindûs and Muhammedans.

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the dome is marked by a deep cornice of concave section, projected sufficiently to catch the ends of the ribs of the groining forming the soffit of the dome.

The cornice, after running round the three inner sides of the vestibule, was carried up round the soffits of the great arch closing the top of the vestibule. Only a fragment of the cornice remains to prove this was the case, and it is shown in detail on Plate XLIV. The ground of the cornice was divided into a series of long panels with scalloped or foiled ends, in orange coloured tiles, enclosed by a narrow edging in blue and white, surrounded by a border of green inlaid with undulating floral scrolls in various colours. Flowers in blue, white and green, connected with tendrils spirally arranged, were let in to the orange field of the panel, whilst in places leaves are curled round and turned over the blue and white edgings enclosing the panel. The treatment is most effective, and to be appreciated should be seen,—as it is impossible to reproduce on a drawing the peculiar transparency and metalic lustre peculiar to the tiling. The section of the cornice is shown at the bottom of the drawing.

The vestibules (see Plate X) are covered by half domes, "which seem to rise from accretions of prismatic *stalactites*." Round the base of the dome are arched panels, separated by the ribs of the groining which continually intersect one another and form all kinds of small prismatic divisions as they converge upwards towards the crown of the dome. The vaulting is similar to that employed by the Moors in Spain in the ornamentation of their vaults and niches, known as *stalactite* vaulting.

Plate XLV is a detail of the panels and groining round the base of the vaulting. The patterns upon the panels—like most of the interior decoration, as distinct from the exterior decoration—are painted upon the surface of the plaster. In some instances the colours have deteriorated, and where this is so they have purposely been omitted on the illustration.

On the lower panels we again meet with the vases seen on the outside of the building, and above them was a golden scroll.

The vestibules lead into the octagonal cenotaph chamber within the mausoleum (see Plan Plate VII), which is covered with a dome 37′-0″ in height, surmounted (see section Plate X) by a cupola standing on a sixteen-sided base, rising considerably above the roof of the building, which was constructed, as mentioned before, solely for effect's sake to lend additional importance to the design.

The whole of the outside of the cupola was coated with square blue and yellow tiles laid in diagonal bands (Plates VI and XLVI). Round the upper edge of the base of the dome is a belt of variegated tiling which is shown on Plate XLVI, and beneath it is a string moulding under which is a frieze band, also in tiling, the pattern of which is depicted on Plate XLVII.

But again returning to the cenotaph chamber, we find four out of the eight sides (see plan, Plate VII) are pierced by square openings leading to the vestibules on the north, south, east and west sides whilst the remaining four are formed into pentagonal recesses, covered by half domes. The walls and the ceilings were covered with stucco and were originally painted with exquisite floral and other patterns. Owing to the tomb having been used as a residence by the *zamîndâr* (farmer) cultivating the surrounding fields, only a few traces of the decoration are left to us, as the smoke from his fires has almost completely destroyed the paintings. They are shown on plates numbered from XLVIII to LVII.

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Plate L is a reproduction of a photograph showing the crown of the dome taken from the floor of the cenotaph chamber, and Plate XLVIII is a diagram showing the painted decoration upon the medallion or centre piece. The soffit of the dome is corbelled out into seven concentric honeycombed rings.

The section through the building (Plate X) shows the construction of the dome, whilst Plate XLIX elucidates the style of painted decoration upon its surface.

Plates LII and LIII illustrate the nature of the ornamentation upon the lower part of the soffit or ceiling of the dome. The flowers forming the wreaths between the groined intersections are conventionalized. They are particularly well drawn, and the different tangential curves flow gracefully one out of the other and fill up, but do not crowd, the groined spaces.

The honeycombed vaulting of the dome springs from a deep and bold concave moulding running round the top of the lower and octagonal portion of the room on a level with the first floor (see Plate II). The ground of the cornice was painted, as Plate LIV shows, a deep chocolate, upon which rich scrolls in light blue and a deeper shade of chocolate, enriched with floral wreaths in gold and deep green, were painted. The nose of the moulding is flat and its face was coloured a dark rich blue, bordered with narrow bands in gold. Upon the blue ground was an undulating scroll, united by golden links of white flowers shaded red.

As before mentioned, the sides of the octagonal cenotaph chamber (Plates VII and X) are deeply recessed from the face of the main wall of the room. The recesses on four of the sides are square and are pierced with doorways leading to the vestibules on the north, south, east and west sides of the chamber, whilst the other four are of a pentagonal shape. All are arched at the top, and the spandrils over the arches are most exquisitely and chastely painted with arabesques in rich and beautiful colours. The designs vary, inasmuch as those upon the spandrils in the forepart of the pentagonal recesses are different to those upon the spandrils over the four arches in front of the entrances. The arabesques upon the spandrils over four of the arches are raised about $\frac{1}{4}$ of an inch from the surface (Plate LV), whereas those over the other arches (Plate LVI) are only painted on the face of the stucco. Here the backgrounds of the spandrils are coloured white, whereas the others are painted a deep Indian red.

In the centre of each spandril is a circular plaque in blue, edged with leaves in gold in the case of one and blue in the case of the other, inscribed with the names of Allah and Muhammad in Arabic characters. Floral scrolls flow from the rim of the plaque in graceful spiral twists and completely fill up the field of the spandril. From their formation it is evident they are the work of no mean artist, but were executed by men thoroughly *au fait* with their craft and who worked for the love of it.

The outer edges of the spandrils are splayed (see section on the bottom of Plate LVI) and are decorated with a creeper in gold and white upon a blue ground enclosed between two gilded *tooth-moulded* borders.

Between the top of the spandrils and the cornice below the springing of the dome (see section, Plate X) covering the room—the surface of the wall is sunk out with oblong panels inscribed with Arabic texts in Tughra characters. The letters are gilded, whilst the ground of the panels is blue. They are enclosed by raised borders in red upon which panels are painted with trefoil ends, containing floral devices in deep chocolate edged with gold.

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AGRA: Chînî-ka-Rauza. Decorated Spandrils over the arched recesses on the Ground Floor of the Cenotaph Chamber [A]

Section

Edwd. C. Smith

Archæological Surveyor N.W.P.

Inches 12 9 6 3 0 1 2 Feet

SCALE OF FEET

BHAIRAV BAKHSH & RAM PRATAP, DEL.

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The borders continue down the face of the piers, which are cut up by small panels coloured blue, decorated with flowers, &c.

The soffits of the recesses are ceiled by *stalactite* half domes decorated in rich colours in keeping with the rest of the chamber. An illustration of one of the ceilings is presented on Plate LVII, from which the style of decoration can be studied. Unfortunately, as mentioned before, the colours have been to a great extent spoilt by smoke from the *zamîndâr's* fires, who for some years made the mausoleum his residence. Although begrimed with smoke and dirt, they are still discernible, and, as far as possible, have been faithfully reproduced on the drawings.

It is impossible to say by whom the chamber was decorated. It is evident the artists were of no mean order, and although most of the decoration may have been done by Indian artists, it is not improbable, judging from various indications, that Chinese decorators assisted in the work.

It is deeply to be regretted that more care was not taken in years past to preserve the mausoleum, which is certainly one of the most interesting in Northern India. Time has no doubt had much to do with the present condition of the building, but what time has not done man has. The tiling on the exterior has been wantonly hacked off by visitors without taste wishing to carry away to distant homes souvenirs of the place.

For whom the tomb was built we do not know. It bears no inscription, but is traditionally ascribed to Afzal Ḳhân, a poet who died at Lahôr in A.D. 1639. In all likelihood it was built during Aurangzîb's time.

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CHAPTER III.

EXAMPLES OF THE STYLE OF DECORATION USED UPON ÎTIMÂD-UD-DAULAH'S TOMB, AGRA, AND THE KIOSQUES ROUND AKBAR'S TOMB AT SIKANDRA.

Similar tiling to that used for decorating the exterior of the Chînî-kâ-Rauza was, as mentioned in the introductory chapter, employed for covering the outside of the kiosques round the third floor of Akbar's tomb at Sikandra (see Plate LVIII), commenced by Akbar himself but completed by his son Jahângîr between A. D. 1605 and 1615. As the work is so closely allied to that upon the Chînî-kâ-Rauza, specimens of a few of the principal patterns are exemplified on Plates LIX to LXIII.

Plate LIX Fig. 1 represents the cupola of one of the kiosques showing the manner in which the tiles are laid, and the remaining plates show the designs in detail.

In most cases star patterns surrounded or combined with hexagonal and other geometrical figures have been used. In some places portions of these patterns have fallen and have been replaced by tiles of a different design. This is noticeable on Plate LXI. Most of the designs are geometrical, but in some cases flowering patterns have been introduced (see Figs. 1 and 2, Plate LX, and Fig. 1, Plate LXII).

On one of the cupolas we find the ancient *swastika* worked in white (Plate LX, Fig. 3), upon the centre of a dark blue star, the points of which are all green, with the exception of one, which is yellow.

In the preceding chapter it was stated that from Jahângîr's time, in addition to other methods, the Moghul architects used mosaic extensively in "pietra-dura" in the decoration of their buildings.

More than one volume could be devoted to the illustration of this mode of ornamentation alone, and it is hoped that at some future time something may be done for this subject; but meanwhile examples of the style are presented on Plates LXIV to LXVII. The illustrations are taken from Îtimâd-ud-daulah's tomb close by the Chînî-kâ-Rauza (see Plate LXVIII). It may be remembered that Îtimâd-ud-daulah was the father of Nûrjahân, the wife of the Emperor Jahângîr. Îtimâd-ud-daulah originally came from Teheran in Persia as an adventurer and was known as Ghayâs-ud-din. He rapidly rose to distinction and attained a high place at court and was honoured by Jahângîr with the title of Îtimâd-ud-daulah. He died at Koṭ Kângrâ in A. D. 1621 and the present monument was erected to his memory by his daughter.

Like the Chînî-kâ-Rauza, the mausoleum stands in the midst of a large garden some 180 yards square, surrounded by a wall, except on the west or river side, where a terrace overlooks the Jumnâ. The entrance to the garden is on the east, through a red sandstone gateway, ornamented with marble mosaic. On the south side of the garden is another red sandstone building, whilst a third commands the river frontage.

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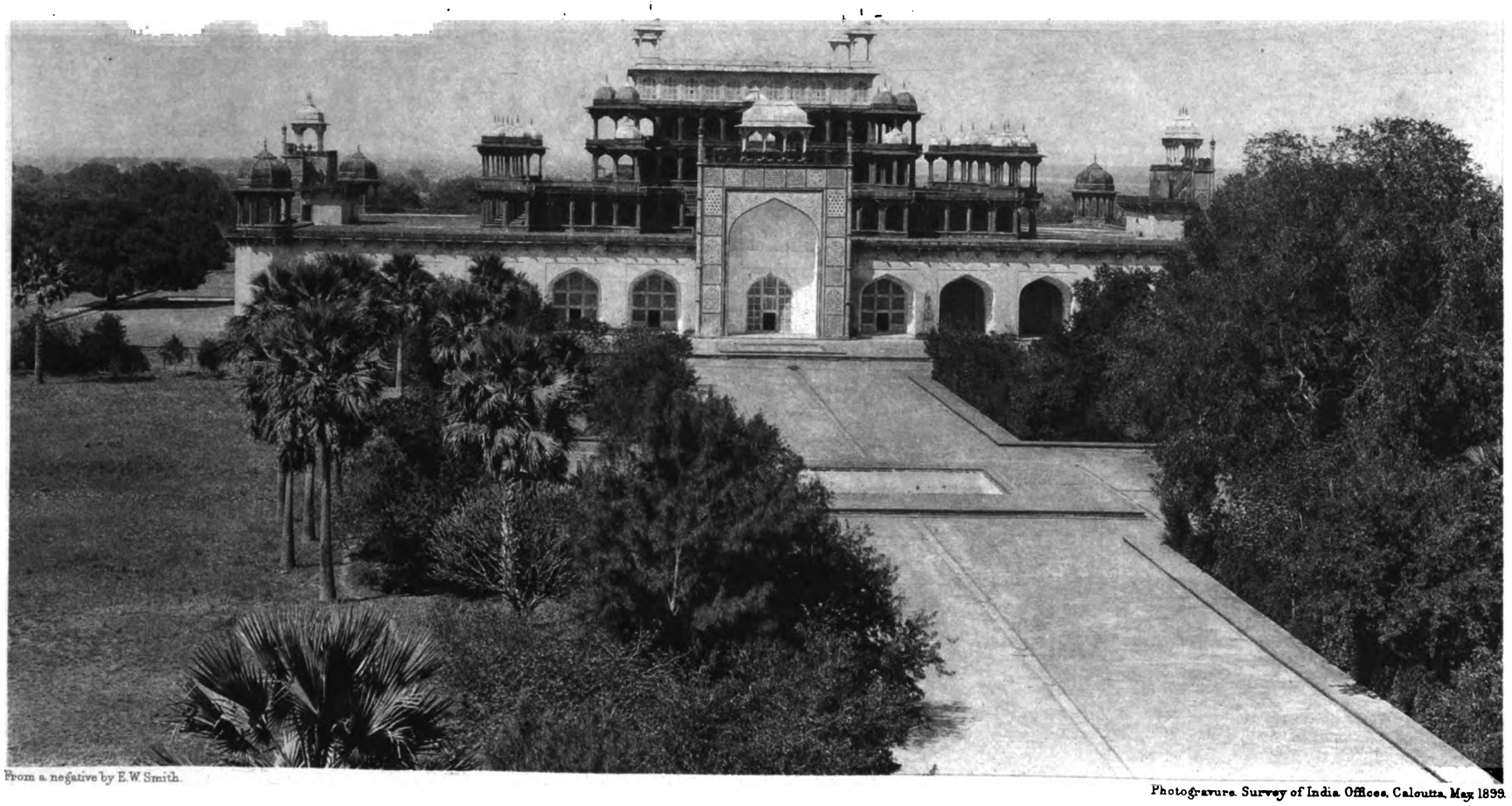

From a negative by E. W. Smith.

Photogravure. Survey of India Offices, Calcutta, May 1899.

SIKANDRA, AGRA: GENERAL VIEW OF AKBAR'S TOMB FROM THE SOUTH.

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The tomb (Plate LXVIII) stands on a *podium;* is rectangular in shape, and measures about 69 feet each way. In the centre is a large domed chamber containing G h a y â s-u d-d i n's tomb, and on the four corners are similar chambers connected one with the other by vestibules. Over the domed chamber is another containing two white marble cenotaphs, surrounded by red marble (*khattû*) borders (Fig. 1, Plate LXV) inlaid with scrolls in bluish-black slate from Ulwar, looped together with small rosettes of white and a mottled marble, called *abri*, which comes from Jesalmir in Râjputâna.

Between the tombs is a band of white marble studded with black rosettes of the same material with white centres separated by figures like Maltese crosses in mottled marble (*dal-chana*).

As may be seen from Plate LXIV the tombs are not in the centre of the chamber. The floor round them is of marble mosaic, the pattern of which may be studied from the same plate. The ground is of white marble, and starting diagonally from the four corners of the floor and surrounding the tombs in irregular twists is a leaf scroll in marble of an old gold colour known in Northern India as *khattû*. Emerging at intervals from the concave side of the spirals are large leaves modelled after those peculiar to Persian, Arabian and Turkish ornament, which fill up to a great extent the vacant spaces between the meanders of the scroll. Underlying the big scroll and subordinate to it is another of intricate design in bluish-black stone. Issuing from the meandering sides of the scroll are flowers and leaves composed of variegated marbles.

Surrounding the floor is a broad chain border of leaves in black stone, *khattû* and *abri* (jasper) inlaid upon a field of white marble. The border is represented in detail on Plate LXV at Fig. 2.

Plate LXVI is a detail drawing of the inlaid ornamentation on the plinth upon which the cenotaph chamber is built (Plate LXVIII). From Plate LXIX it will be seen that the chamber is lighted by rich traceried marble screens supported between square piers inlaid with mosaic floral patterns. A detail drawing of one of the piers and marble screens is presented on Plate LXVI.

On the four corners of the tomb, Plate LXX, are turrets containing staircases leading from the ground floor of the mausoleum to the cenotaph chamber on the first floor. In keeping with the rest of the structure they are inlaid from top to bottom with various geometrical and floral designs in marble mosaic and valuable stones. In the turrets we have samples of both kinds of the inlaid work spoken of before, the mosaic in marble and the "pietra-dura." The former style of ornamentation preceded the latter. It was extensively used in the gateways leading to A k b a r's tomb, as well as the gateways around the grounds enclosing Î t i m â d-u d-d a u l a h's tomb. In S h â h J a h â n's time it gave place entirely to the "pietra-dura" decoration as exemplified in the Tâj, &c.

The bottoms of the turrets at the four corners of the building are polygonal in shape, but the upper parts are cylindrical, and are surmounted by cupolas. The designs on the lower and middle portions are chiefly composed of geometrical patterns, whilst those upon the upper parts are made up of conventionalized foliage.

Plate LXVII is a diagram of the ornamentation upon one of the turrets. It should be studied along with Plates LXX and LXXI. The former gives a perspective view of one of the towers along with the cenotaph chamber and the lower portion of the

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building. Plate LXXI shows the upper part of the turret, the sides of which are panelled and inlaid with vases, cups, cypresses, &c. A detail drawing of one of the panels is given on Plate LXXII. The entrances to the tomb on the ground floor are similarly decorated. On the sides of the entrances are dadoes (Plate LXXIII) and the panelling between them and the springing of the arches over the doorways (Plate LXXIV), are beautified with goblets, water and flower vases, &c., &c., all in inlaid marble. The soffits of the arches over the entrances are of a *stalactite* form in white marble, exquisitely carved with rich and delicate arabesques, which to be appreciated should be seen (Plate LXXV). The writer knows nothing more beautiful and chaste than the soffits of these archways, which as specimens of Oriental carving of the early part of the 17th century cannot be surpassed.

From Plate LXX it will be seen that the entire façades from the plinth to the parapet are overlaid with mosaic. The plinth and dado are illustrated on Plate LXXVII. Between the top of the dado and the cornice round the roof, the faces of the walls are cut up by archways and panels veneered with rich geometrical designs in marble mosaic bounded by floral borders in "pietra-dura" or inlaid work. Some of the designs are very beautiful, and a sample of one of the panels is delineated on Plate LXXVI. It will be observed how curiously and ingeniously the patterns are worked at the top and bottom of the panels.

Before Jahângîr's time little in the way of mosaic ornamentation had been attempted by the Moghul architects. We meet with it occasionally in Akbar's buildings at Fathpûr Sîkrî, erected more towards the close of his reign; but it was not until Jahângîr's reign that it was extensively employed and became one of the characteristic features of the Moghul style. As before mentioned, we first see inlaid work extensively used upon the gate entrances to the grounds round Akbar's tomb at Sikandra, erected during the first ten years of Jahângîr's reign, A.D. 1605-1615. In Îtimâd-ud-daulah's tomb (A.D. 1615-1628) we have both mosaic in coloured marbles and inlaid work, but after Jahângîr's time the mosaic ornamentation gave place entirely to and was supplanted by inlaid decoration. The finest specimens of the inlaid work are to be seen in the Tâj, the palaces at Agra, and those at Delhi built by Shâh Jâhan.

It was just prior to Shâh Jahân's time that the inlaid style of ornamentation called "pietra-dura" came into vogue and was so extensively used in Florence and other places in Europe. It is generally thought it was introduced from Italy by the Italian artists in Shâh Jahân's service.

No attempt has been made in this report to illustrate fully the ornamentation upon Îtimâd-ud-daulah's Tomb, as it is intended to devote a separate volume to the subject; but the illustrations presented afford some idea of the style of decoration employed by the architect in the enrichment of the façades. Plates LXXIII, LXXIV, LXXVI and LXXVII, though they show the patterns, being photo-etchings, cannot afford an idea of the colouring of the various marbles employed.

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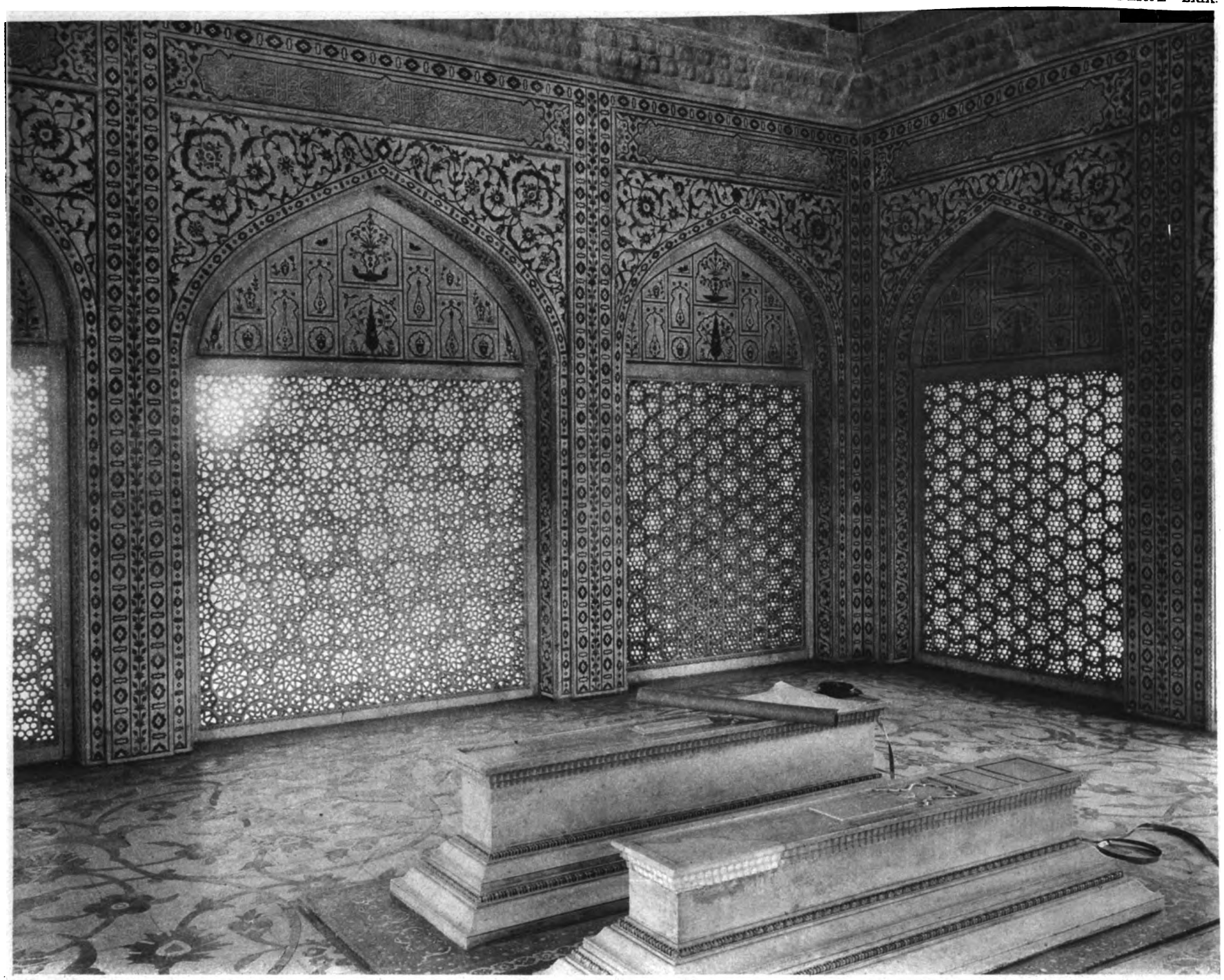

Negative by Edmd. W. Smith.

Photogravure. Survey of India Offices, Calcutta, June 1893.

AGRA: ITIMAD-UD-DAULAH'S TOMB. INTERIOR OF THE MARBLE CENOTAPH CHAMBER ON THE FIRST FLOOR.

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Photogravure Survey of India Offices. Calcutta, May 1899.

SIKANDRA. AGRA: THE KÂÑCH MAHAL. GENERAL VIEW FROM THE NORTH.

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CHAPTER IV.

SIKANDRÂ, THE KÂÑCH MAHAL.

A little way to the east of the main entrance to Akbar's tomb at Sikandrâ, within a walled garden, presented some thirty years ago by Government to the Church Missionary Society, is a very fine specimen of early 17th century domestic architecture. The house was probably built by the Emperor Jahângîr for his queen Jodh Bai, as it is sometimes called Jodh Bâî's Mahal. By others it is known as Bîr Bal's house, but the usual appellation it goes under is the Kâñch Mahal, and this on account of the encaustic tiling ornamenting the north façade. The style of its architecture belongs to the early part of the 17th century, when the floridness which marks, and is so characteristic of, the later Moghul style commenced to be fashionable. It could hardly therefore have belonged to Bîr Bal, who was killed in battle in A.D. 1586.

The residence stands on the right hand side of the main road leading from Âgrâ to Sikandrâ, but as it is hidden among the trees of the garden it can hardly be seen by passers-by. The place was probably erected by Jahângîr as a country-seat where the Emperor and his wife, Jodh Bâi, could retire from the court at Âgrâ to enjoy the quietness of the country, and within view of the beautiful grounds surrounding the mausoleum he had erected to the memory of his illustrious father, Akbar.

Externally the house measures 52′-10″ by 45′-2″. It is two storeys high (Plate LXXVIII) and on the ground floor (Plate LXXIX) is a central hall 16 feet square, with three rooms in its north and three on its south side. The middle rooms on the east and west sides of the hall in the centre of the building are separated from it by a range of coupled columns (see section, Plate LXXXI) standing on a broad plinth 2′-9″ high. The spaces or bays between the columns are open. The shafts of the columns are octagonal, and the sides are carved with the chevron so frequently met with in Muhammadan buildings of the period. The bases are fan-shaped and rest upon a moulded plinth, whilst the capitals are of the *stalactite* form. In one or two instances similar columns are found in the Fatḥpûr Sîkrî buildings erected during Akbar's reign, but they were not commonly used till Jahângîr's time. Traversing the tops of the columns, on a level with the floor of the upper storey, is a panelled entablature surmounted by a plain concave cornice, which horizontally divides the walls of the hall into two parts. The hall is now open from the floor to the roof, and around the upper part is an arcading (see first floor plan, Plate LXXX). The piers of the arcades are square and quite plain, and are placed, according to architectural canons, over those in the hall below. The bays between the piers, although now open, were probably at one time filled in with stone lattices.

Projecting from the sides of the capitals over the columns on the ground floor as well as from the four corners of the hall, are moulded brackets, which in all likelihood supported the struts of a light framing carrying a canopy stretching across the hall on a level with the first floor.

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In the four corners of the building are small rooms, with plainly groined ceilings, leading into the chambers on the east and west sides of the hall (see ground plan, Plate LXXIX). The rooms at the east and west corners, some 9′-10″ square, are intact, but the opposite rooms have been altered somewhat from their original shape by building walls across their ends. In the south-east corner room is a flight of steps, connecting with an inner staircase which leads to the upper floor. On the opposite side of the building is a corresponding staircase. In front of the rooms on the north-east and north-west angles of the building are two beautifully carved archways standing on a high plinth.

From Plate LXXX it may be seen that the rooms on the upper floor are ranged immediately over those on the ground floor, and that they are connected by passages. The interior walls are cut up by recesses, which were used as cupboards. At the top the recesses are closed by radiating brick arches and in some places they are grouped together (see section, Plate LXXXI). The rooms on the north-east and north-west angles of the building have *bay-windows* which overlook the grounds round A k b a r's tomb. These windows are the most marked feature in the building, as *bay-windows* were not commonly used by the Moghul architects, and are seldom or ever met with in their buildings. In plan the windows are half hexagons and the sides are filled in with pierced stone screens (Plates LXXX, LXXXIII, and LXXXIV).

Projecting from the east side of the north-east room and the west side of the north-west room is a square stone balcony supported on four elaborately ornamented brackets (Plate LXXXV). The sides are open, but they are closed at the top by a deep dripstone (see section A.B., Fig. 2, Plate LXXXI) carried on stone lintels, upheld on slender octagonal columns rising from the lower corners of the balconies. Covering the balconies are canopied roofs ornamented with a rich battlemented band of encaustic tiling similar to that shown on Plate LXXXIII.

Detail drawings of the *bay-windows* are given on Plates LXXXIII and LXXXIV. From these it will be seen that they are carried on elaborately carved and moulded stone brackets tailed well into the wall (Fig. 2, Plate LXXXIV). Let into the face of the wall beneath the window is a sunk stone panel, sculptured upon which, in *alto-relievo*, are two tusker elephants ridden by *mahauts*. The elephants face each other and their trunks are interlocked over the centre of the panel. They are fairly well sculptured. Carved representations of animals are forbidden by the Qurân, but nevertheless elephants and other animals were frequently carved upon the Moghul buildings, and more especially upon those at F a ṭ h p û r S î k r î and Â g r â. In later times, under A u r a n g z î b's fanatical sway, the practice was prohibited, and generally Moghul buildings assumed altogether a plainer appearance.

But returning to the *bay-window*. The floor and mullions are of stone and the sides of the window are filled in with perforated stone lattice screens with arched tops. In the centre of each screen is a small flat-headed opening, and beneath it is a pierced stone trellis. Projecting over the top of the window is a deep eave (see Fig. 2, Plate LXXXIII), carried on small moulded brackets, with a fringe of moulded pendants along the underside. Above the eaves is a red sandstone band, inlaid with buff coloured panels in stone, over which is a red sandstone string-course, moulded top and bottom and inlaid along the front with green encaustic tiles. The top of the window is roofed

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by a half-dome in cement, covered on the exterior with parallel rows of star-shaped encaustic tiles in blue and green embedded in hexagonal borders of an orange colour. At the springing of the roof is a battlemented *fascia* in red sandstone, inlaid with orange and blue tiles. The general effect of the tiling combined with the dark red sandstone traceried windows is most effective. It is unique and pleasing, and one wonders why like designs were not more frequently used by the Moghul architects.

From an examination of the building it would appear that only the north façade was completed. The remaining fronts are built in plain brickwork in very thin courses. The south front is stuccoed over, and from a modern dentilated cornice over the top of the entrance and various other foreign innovations, it is evident that it is not the original façade. The present front was erected about the time the property was made over to the Church Missionary Society.

A side view of the east façade is presented on Plate LXXVIII and a portion of the west façade on Plate LXXXV. The stone veneering on the north façade is continued round and stops short on the north-east and north-west corners of the building.

The principal façade faces north, and not, as one would expect, towards the main road leading to Âgrâ. One rather wonders at this, but perhaps in J a h â n g î r's time the principal road was on the north side of the house. Supposing this not to be the case, the north may have been made the principal façade as it overlooked the grounds round A k b a r's tomb.

A general view of the house taken from the north-east is given on Plate LXXVIII, and a drawing of a half of the north façade on Plate LXXXII. In the centre of the façade is an exceptionally fine porch 16′-9″ in length by 10′-0″ in breadth and 25′-9″ in height, which will be described later on. On the sides of the porch are archways which covered deep recesses built on the top of the plinth which was pulled down years ago to make a way into the ground floor rooms. On the north-east and north-west corners of the building are similar archways and a detail drawing of one is given on Plate LXXXVI. The tops of the archways are enclosed by square-headed architraves carved with undulating creepers. The *intrados* of the arch is beautified with a fringe of lotus buds, and the spandril between the *extrados* of the arch and the architrave confining it is decorated with rich leaf scrolls in red sandstone inlaid with white marble.

The red sandstone ashlaring upon the sides of the archways and the windows above (Plate LXXXII) is cut up into numerous oblong divisions by raised bands prettily carved with a creeper resembling that upon the architrave enclosing the archway detailed on Plate LXXXVI. In each division is a stone panel, sculptured with a *stalk-vase*, supported at the base by a couple of cups. The panels are varied in design (Plates LXXXVII and LXXXVIII) and are enclosed by broad borders of raised geometrical ornament. In some instances they are divided by horizontal bands into two, and others into three parts. In the upper divisions circular leaf rosettes are chiselled in high relief, surrounded by a scalloped frame adorned on the face by garlands of leaves and flowers. The lower divisions (Plate LXXXVIII) are filled in at the top with engrailed arches of the horse-shoe type, and the spandrils and sides are enriched with foliage. Vases and cups, like those sculptured upon these panels, were very commonly used upon Moghul buildings erected after A k b a r's reign.

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Extending all along the top of the façade is a series of panels similar in design to those on the sides of the entrances and bay-windows, but in shape they are square instead of oblong. Above the panels is a string-moulding inlaid with green enamel tiling, and over it is a red sandstone parapet (Fig. 1, Plate XC). The front face of the parapet is carved with a battlemented pattern, and the *merlons* are engrailed and inlaid with blue and the *embrasures* with orange coloured tiles. The combination of the red stone with the blue and orange tiling is very effective and harmonizes well with the tiling covering the roofs of the bay-windows.

The entrance porch in the centre of the north façade (Plates LXXIX and XCI) is without exception one of the finest to be met with in the whole of the Âgrâ district. It measures 16′-9″ in length by 10′-0″ in width. In front is a splendid arch 23′-9″ in height and the entire width of the porch. The arch is four-centered and the jambs extend in a straight line down to the top of the plinth of the building. The face of the plinth (Plate XCII) is cut up by panels filled in with stone slabs richly carved with foliage (Plate XCIII). Along the upper part of the base of the plinth is a bold pointed moulding not unlike that known to architects as the *lamb's-tongue*, and beneath it is an enriched *cyma*. The cap of the plinth is square, but is moulded with an *astragal* on the underside, and below this is a *cavetto* ornamented with rich foliage in relief (see Fig. 2, Plate XCII).

Details of the archway in front of the porch are given on Plates XCIV and XCV. It will be observed from the elevation of the façade (Plate LXXXII) that the sides of the arch are continued down in an unbroken line to the plinth. This is a characteristic feature of Muhammadan architecture after Akbar's time. In early Muhammadan work the arch sprang from pendants upon the sides of the jambs, later on it was carried down to the ground by shafts, and subsequently, as in the present instance, it extended straight to the floor or pavement in one unbroken line. The *jambs* are *splayed* and the face of the *splay* is beautifully embellished with a *feather* fret upon a ground of conventional foliage (Plate XCIV), whilst the outer sides are carved with circular rosettes, and the inner sides with small oblong raised panels with flowered ends, separated by rosettes. The same pattern, but in a more elaborate form, is found upon the *soffit* of the eaves round the Turkish Sultâna's house at Faṭhpûr Sîkri.[1] The *spandrils* above the arch are enriched with raised floral scrolls in red sandstone, the interstices between the scrolls being veneered with white marble. The lines of the scrolls are singularly free and pleasing, and flow in graceful gradations from the centre to the corners of the spandrils. In earlier Moghul work, as at Faṭhpûr Sîkrî, we find the spandrils almost plain, a boss only being carved in the centre. Flowing tracery was not in general use, although in the later buildings it is occasionally met with. It did not become general till the 17th century, and this is an additional reason for ascribing the erection of the Kâñch Mahal to Jahângîr's and not to Akbar's reign. The *intrados* of the arch over the porch is daintily carved with a fringe of lotus buds springing from the heads of small elephants carved on moulded pendants upon the springing of the arch (Fig. 2, Plate XCV). The archway extends the depth of the porch, and the entire *soffit* is carved with raised geometrical tracery composed of duodecagons and hexagons on a field of

[1] *Moghul Architecture of Fathpûr Sikri*, by Edmund W. Smith.

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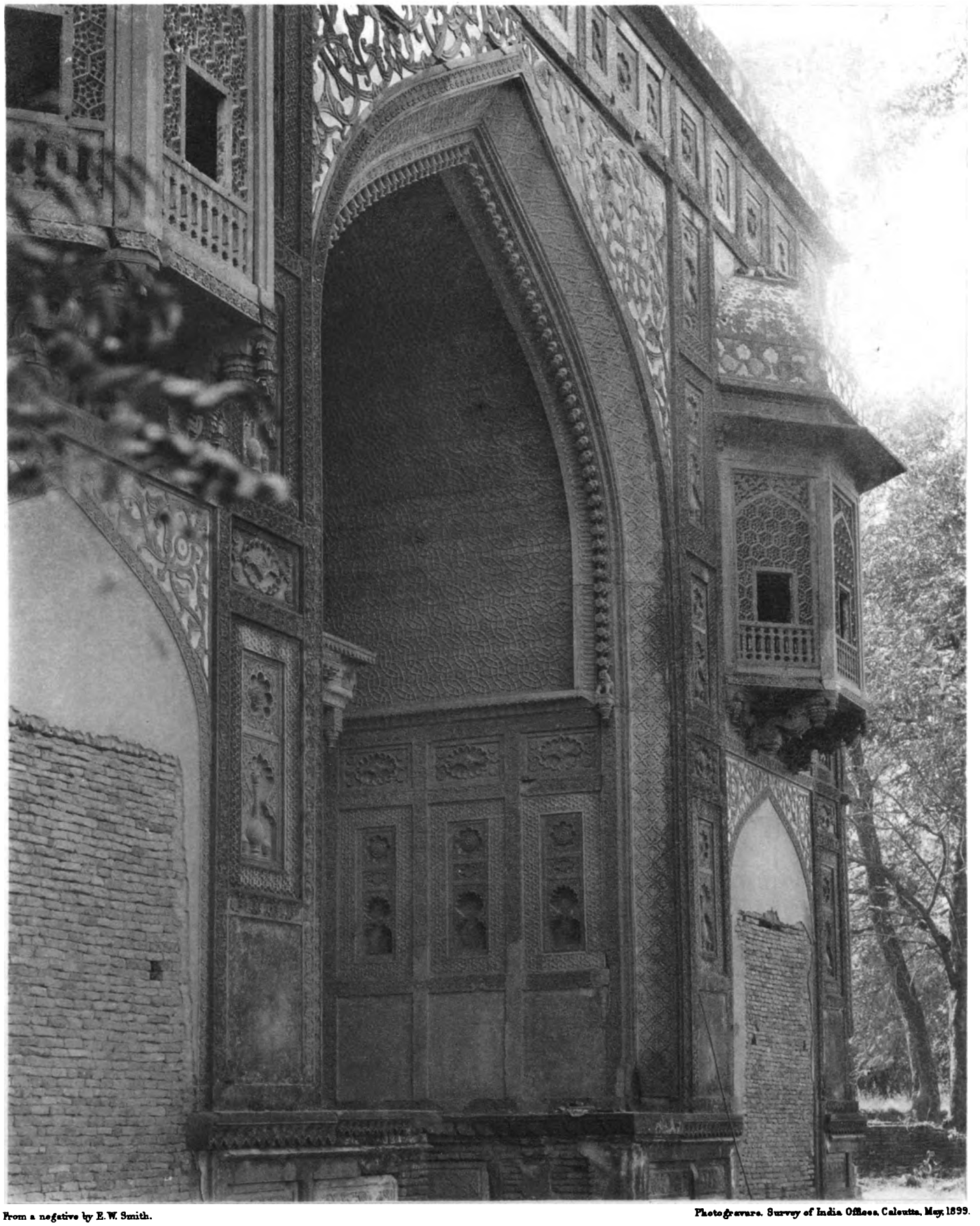

From a negative by E. W. Smith.

Photogravure. Survey of India Offices, Calcutta, May, 1899.

SIKANDRA, AGRA: THE KÂÑCH MAHAL. THE NORTH ENTRANCE.

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tiny rosettes (Plates XCI and XCVI). Downwards, from the springing of the arch as far as the plinth, the entire side of the archway is cut up by panels and niches (Plate XCVI). The niches (Plate XCVI) are similar to those in the north façade and are enclosed by cusped horse-shoe-shaped arches. A diagram of one, to a large scale, is presented on Plate XCVII. Fig. 1 is a half plan; Fig. 2, a section, and Fig. 3, a half elevation of one of the niches. The plinth on the sides of the porch, as before mentioned, was purposely made broad at the top, so that it could be used as a seat by porters.

The rear wall of the porch is in keeping with the lateral walls, and in the centre of it is the principal entrance to the house. Here we see the strange blending of Hindû with Muhammadan architecture, which came into vogue in the 16th century under Akbar, and gave rise to what is known as the mixed Hindû-Muhammadan style of Upper India. The entrance throughout is more Hindû than Muhammadan in design. The door jambs and lintel are of stone. They are slightly sunk (Plate XCIX) on the face, and are sculptured with a leaf scroll in relief. The architraves project very slightly in front of the stone framing, and the inner moulding is carved with lotus buds, and the outer with an undulating creeper. Between the two is the *tooth* moulding so common to Moghul architecture and which is found throughout Akbar's buildings at Faṭḥpûr Sîkrî. Surrounding the architrave is a broad mosaic border composed of stars and hexagons.

Over the doorway is a stone balcony, and extending from its floor to the soffit of the carved ceiling covering the porch is a large arched open window framed by an architrave similarly carved to that round the door beneath. The balcony projects 2′-10″ in front of the door and is supported on six particularly handsome stone brackets. The brackets, hewn out of one piece of stone, are exquisitely carved both upon the front and sides, and project 2′-2″ from the wall. At the top of the bracket is a border, carved with a creeper, which merges into a corresponding border over the tops of three panels carved upon the face of the masonry between the brackets. On the front of the bracket is a pear-shaped pendant, moulded and carved with leaves and behind it, on a lower level, is a similar pendant. The face of the bracket is moulded and stops on a square *die*, carved on the sides, and finished off at the bottom with a moulded knob (Plate C). The mouldings on the brackets are beautifully worked, and the *arrises* are particularly sharp and crisp. It is seldom one comes across such delicate detail in stone. The work belongs more to the province of the wood-carver than of the stone-mason, and had the brackets not been so well-protected from the weather by the porch, the mouldings and carving would have decayed long ago. Projecting at right angles to the wall and surmounting the top of the brackets are small stone beams carrying the floor of the balcony (see section through the porch, Plate XCVI). The ends of the beams are concealed by a stone *fascia* adorned by a fringe of tassels (Plate XC, Fig. 2). The floor projects some 3″ or so beyond the top of the *fascia*. The sides of the balcony are *now* uninclosed, but originally they were protected by stone balconies. The face of the wall on the sides of the window over the porch door is cut up by a series of very small square and oblong-shaped panels (Plate XC, Fig. 2). They are partially closed by *engrailed* fronts and not a few are ornamented like the façade of the house with vases, &c.

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It is seldom one sees a house so profusely and elaborately carved as the Kâñch Mahal, and yet not in bad taste. The Turkish Sultâna's and Bir Bal's houses at Faṭhpûr Sîkrî, erected during the latter part of the 16th century, are considered to be among the most minutely carved buildings in India, but the north façade of the Kâñch Mahal vies with, even if it does not excel them. Such façades are exceptional and not often met with.

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CHAPTER V.

SÛRAJ BHÂN-KA-BÂGH.

There is a sister house to the Kâñch Mahal some little distance from it on the left hand side of the Âgrâ road known as the Sûraj Bhân-ka-Bâgh. On the outside the house measures 55′-0″ in length by 45′-5″ in depth. The front or principal façade, unlike the Kâñch Mahal, faces towards the Âgrâ road. On the east and north sides is a raised plinth 17′-4″ in width. The south façade (Plate CI) and portions of the east and west (Plates CII and CIII) are built in red sandstone, the remaining portions being finished off in stucco divided up into panels (Plate CII). The south front, as Plate CI shows, is treated somewhat after the manner of the north façade of the Kâñch Mahal. In the centre is a great arch in front of the porch extending the whole height of the façade, and on each side is a wing divided into an upper and lower storey. In both storeys are large, deep, arched recesses. The back and side walls of the recesses are panelled from top to bottom and the spandrils are beautifully carved, similarly to those over the doorways in the Kâñch Mahal. They are entirely in red sandstone with the exception of an outer border, which is in white marble. The great arch in front of the porch is plainer than the porch arch of the Kâñch Mahal. Both the jambs and the spandrils are plain, but enclosing the outer sides of the spandrils is a band of white marble.

The entire surface of the walls of the porch is cut up by small panels carved with the water-bottle, &c., and the entrance leading from the porch into the house vies with that of the Kâñch Mahal. There are no less than 70 panels on each of the side walls and some 100 or more in the rear wall. The ceiling is not arched like that over the Kâñch Mahal porch, but it is covered by a semi-dome supported on pendentives. The plinth is treated like that of the Kâñch Mahal and returns round the sides of the porch wall (Plate CI) to form a bench for domestics and others to rest upon. Like the sister building, the Kâñch Mahal, the house is two storeys high, on the ground floor is a central octagonal room 18′-6″ in diameter with others on the east and west sides. Separating the rooms are columns and flat archways like those on the ground floor of the Kâñch Mahal. There is a cornice over the top of the arches carved with a geometrical pattern. The upstair rooms are ranged over those below, but on the north and south sides are small passages. The passage on the north opens on to a recessed balcony partially enclosed along the front by an arcade. The piers are disposed over those below in front of the entrance leading into the ground floor. With the exception of this detail the north façade lays no claim to architectural pretensions. On the east and west sides of the entrance are inner staircases leading to the first floor and the roof.

The roof is flat and is made of concrete cemented over. The parapet walls are carried up considerably higher than the roof to form screens, behind which the inmates of the Zanâna could lounge or promenade and enjoy the fresh air without fear of being seen or overlooked. The tops of the staircases, on the east and west sides

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of the house, where they lead out on to the roof, are finished off by small square turrets surmounted by domes, resting upon octagonal bases. Round the top of the domes a battlemented cresting is painted in red, and along the bottom a row of "*bulls'-eyes*" in silvered-glass has been inserted in the masonry. Beneath it is a string-moulding decorated in colour. The turrets are rather picturesque and help to break up the rigid skyline and the severeness of the east and west façades (Plate CII), which, unlike those on the south and north consist only of plain stuccoed panelled walls pierced here and there by square-headed window openings protected to some extent from the blinding monsoon rains and the glare of the summer sun by deep dripstones, carried on moulded brackets, running horizontally along the façade a few feet below the parapet.

The south-east and south-west angles of the east and west fronts (Plate CII) are treated altogether differently from the remainder of the façades. Like the north-east and north-west angles of the K â ñ c h M a h a l, they are designed in conformity with the principal elevation and are almost counterparts of the wings upon the sides of the main archway in front of the porch. They are so elaborately decorated with chiselled ornamentation in the form of exquisite geometrical frets, water-vases, &c., that the baldness of the remainder of the façade is made more apparent than it otherwise would have been. In order to obtain an imposing front, the sides of the house have been sacrificed, but want of funds or materials may have had something to do with it.

Of the two houses the Kâñch Mahal is more handsome than the S û r a j B h â n-k a-B â g h. The façades are not so stiff, being broken up by the bay-windows and balconies over the arched entrances on the ground floor. The treatment of the panelling upon the walls is altogether better. The panels are larger and bolder than those upon the wall of the house in S û r a j B h â n-k a-B â g h, which are far too small to be effective. They savour more of the work of the wood-carver than the stone-cutter, and would have been more appropriate had they been employed in the interior instead of the exterior of the house.

It is not often one sees houses so elaborately ornamented as the S û r a j B h â n-k a-B â g h and the K â ñ c h M a h a l, which, as typical specimens of 17th century Muhammadan architecture, should be carefully preserved.

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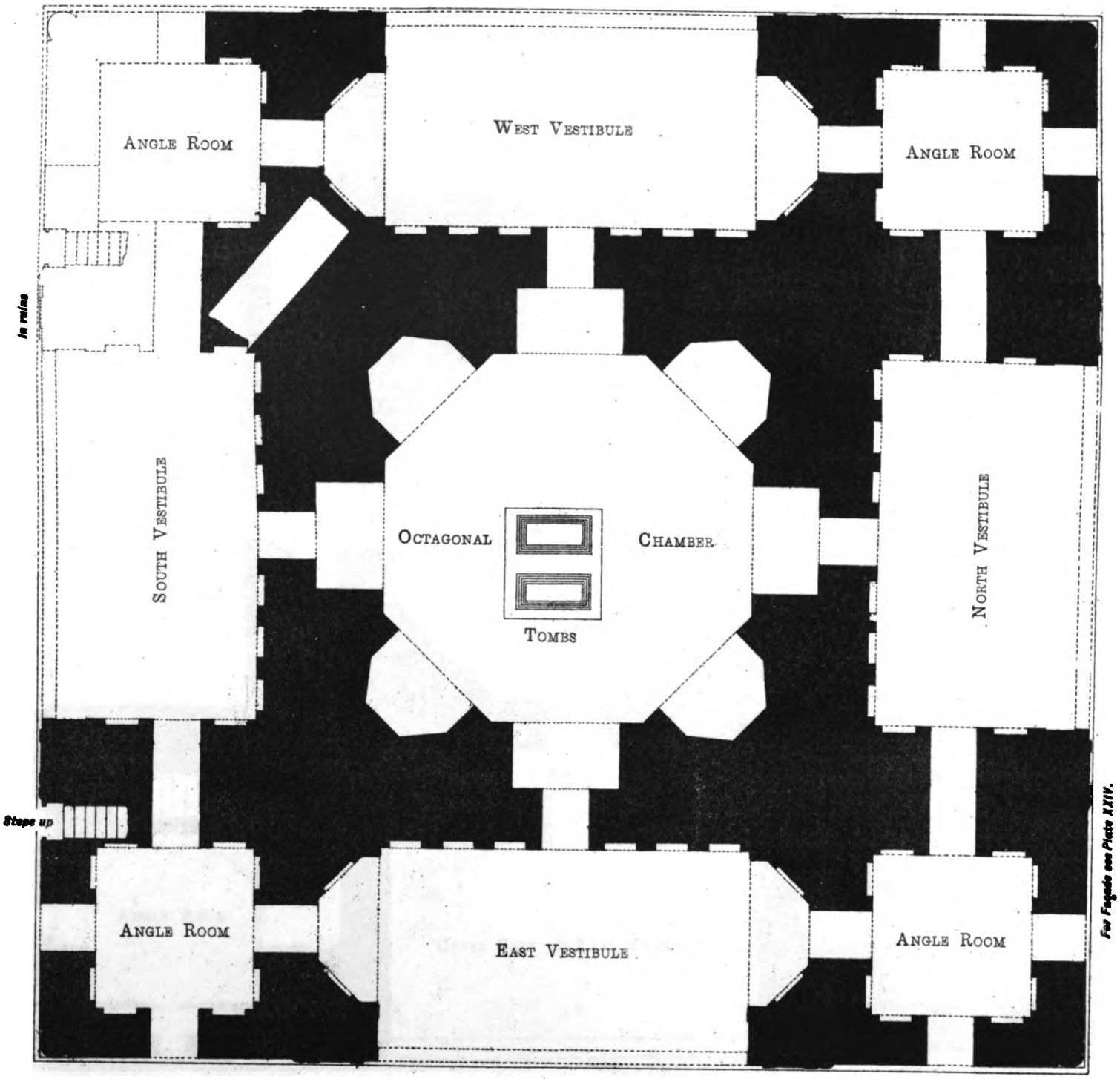
AGRA.—CHÎNÎ-KA-RAUZA.

PLATE VII.

GROUND FLOOR PLAN.



Shekam Beg. delt.

GROUND PLAN

For Façade see Plate XI.

SCALE

FEET 10 5 0 10 20 30 40 FEET

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Archæological Survey of India, N. W. P. Circle, 1899.

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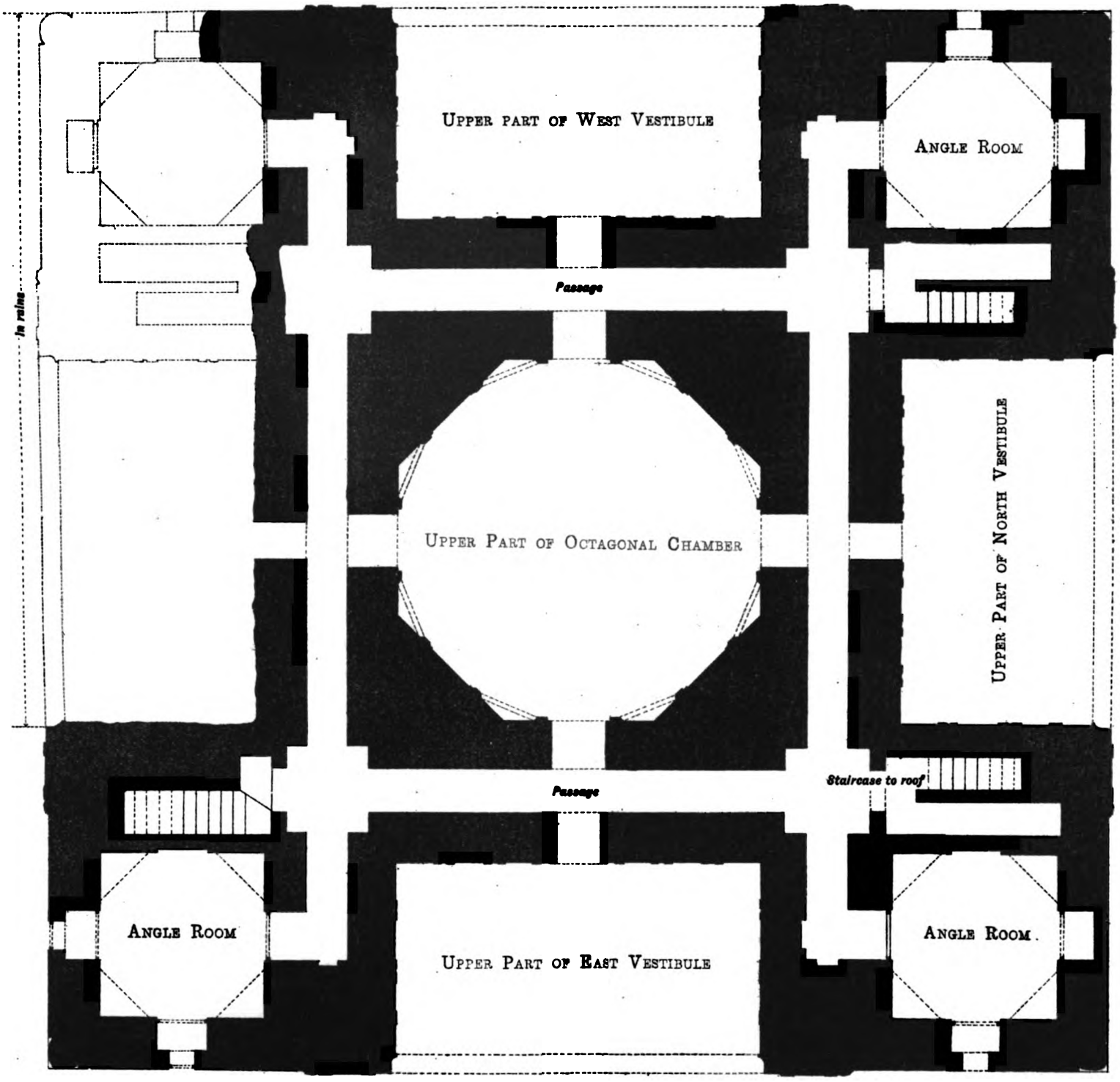
AGRA.—CHÎNÎ-KA-RAUZA. PLATE VIII.

UPPER FLOOR PLAN.



Gholam Beg, delt.

UPPER FLOOR PLAN

SCALE

FEET 10 5 0 10 20 30 40 FEET

Archæological Survey of India, N. W. P. Circle, 1899

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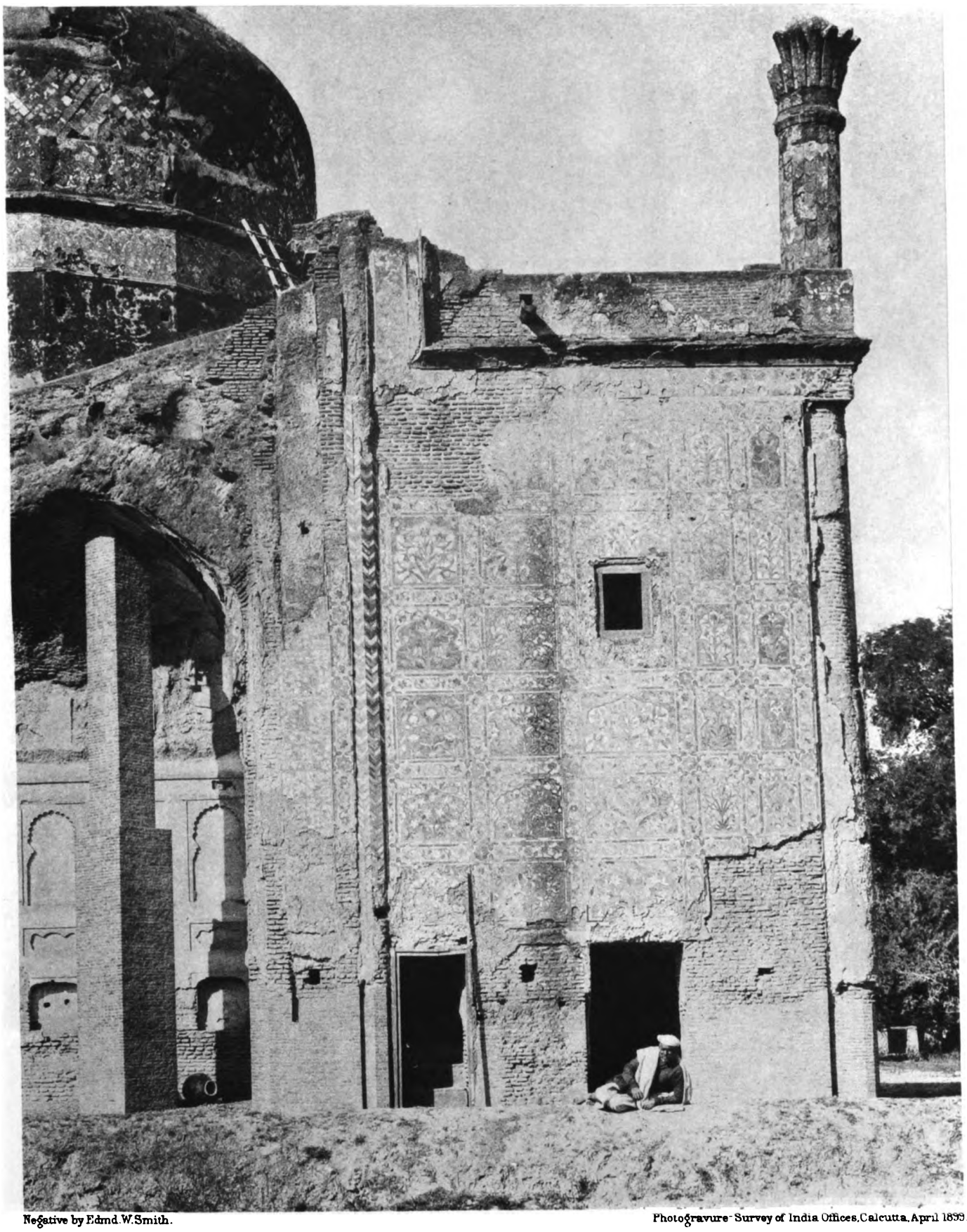

Negative by Edmd. W. Smith.

Photogravure Survey of India Offices, Calcutta, April 1933.

AGRA: CHÎNI-KA-RAWZA. THE SOUTH EAST CORNER OF THE TOMB.

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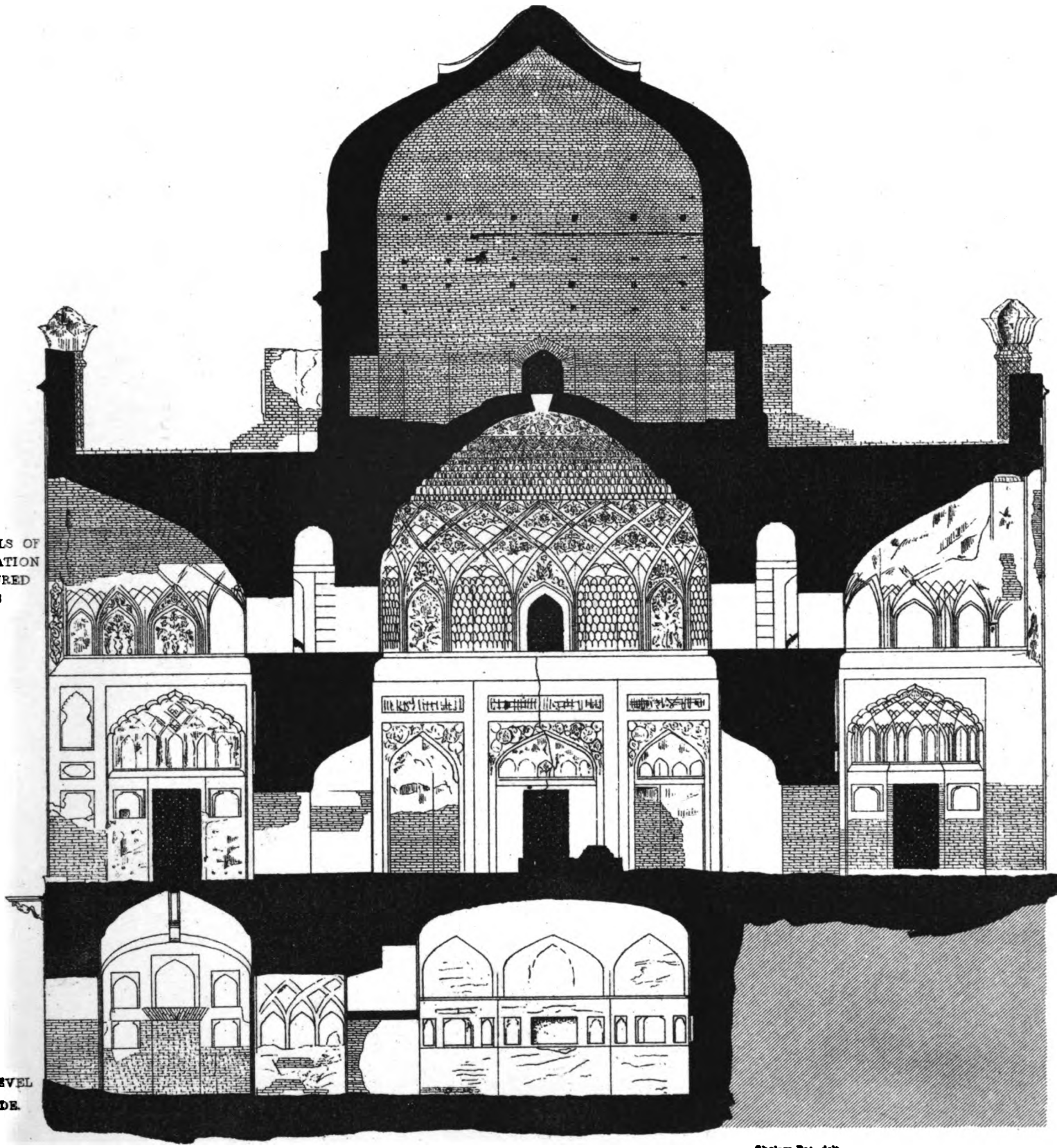

Ghulam Beg, delt.

THE CRYPT.

SECTION FROM WEST TO EAST

DETAILS OF
AMENTATION
COLOURED
PLATES

SCALE

10 5 0 10 20 30 40 50 60 70 80 FEET

PHOTOZINCOGRAPHED AT THE SURVEY OF INDIA OFFICE, CALCUTTA, JUNE 1900.

Archæological Survey of India. N. W. P. Circle, 1899.

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N.B.—For detail of Column marked A on the Eleva

" " " B "
" Cornice " C "
" Panel " D "
" " " E "
" " " F "
" " " G "

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SOHUN LAL.

Section

Inches 12 6 0 1 2 3 Feet

SCALE OF FEET

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Archæological Surveyor N.W.P.

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PLATE XIII.

...ING. EAST FAÇADE.

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Fig. 1. Elevation of shafts upon the angles of the building—marked A on the Elevation, Plate XI.

Fig. 5. Section through wall showing *keys* of plaster into which the tiling is bedded.

Fig. 3. Elevation of shafts on the sides of the great archways marked B on Plate XI.

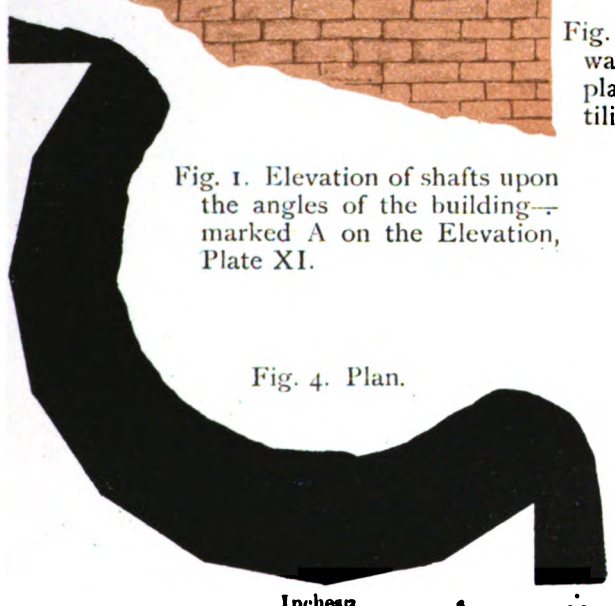
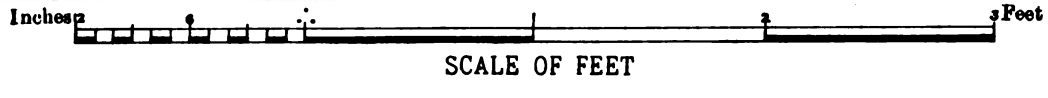


Fig. 4. Plan.

Fig. 2. Plan.

SOHUN LAL, DEL.



SCALE OF FEET

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Archæological Surveyor N.W.P.

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AGRA : CHINÍ-KA-RAUZA. DETAILS OF FINIALS SURMOUNTING POLYGONAL SHAFTS UPON THE ANGLES OF THE TOMB.

Inches 12 6 1 2 3 Feet

SCALE OF FEET

RAM PRATAP & SOHAN LAL,

Edmund W. Smith

Archæological Surveyor N.W.P.

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AGRA : CHÎNÎ-KA-RAUZA. EAST FAÇADE—TILED SPANDRILS OVER THE ARCHED ENTRANCE.

Corresponding to that marked M on the Elevation, Plate XI.

Inches 0 6 1 2 3 Feet

SCALE OF FEET

Edmund W Smith

Archæological Surveyor N.W.P.

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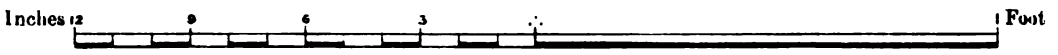
AGRA : Chînî-ka-Rauza. Tiled Panels on the East Façade, South Side.

Panel marked H on the Elevation, Plate XI.

RAM PRATAP I. DEL.



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Archæological Surveyor N.W.P.

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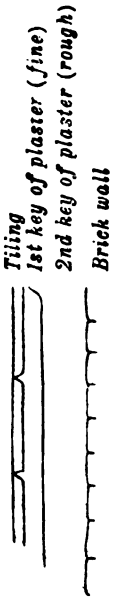
Digitized by Google

AGRA : CHÍNÍ-KA-RAUZA. TILED PANELS ON THE EAST FAÇADE, SOUTH SIDE.

Panel marked L on the Elevation, Plate XI.



Section through wall showing *keys* of plaster into which the tiling is bedded.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edmund W. Smith

RAM PRATAP I. DEL

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

From a negative by E.W. Smith.

Photogravure. Survey of India Offices, Calcutta, May, 1898.

AGRA.- THE CHÎNÎ-KA-RAUZA.- EAST FAÇADE, NORTH END.

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Digitized by Google

Marked C on the East Façade, Plate XI.

RAM PRATAP I

Inches 12 6 1 2 3 4 Feet

SCALE OF FEET

Section

Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

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Marked C on the East Façade, Plate XI.

RAM PRATAP I

Inches 12 6 1 2 3 4 Feet

SCALE OF FEET

Section

Edward W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

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AGRA : CHÎNÎ-KA-RAUZA. TILED PANEL ON THE EAST FAÇADE, NORTH SIDE.

Large archway over the first floor window. Corresponding to that marked D on the Elevation, Plate XI.

SOHUN LAL, DEL.

Inches 12 6 0 1 2 3 4 Feet

SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Tiled Panels on the East Façade, South Side.

Arch over doorway. Marked K on the Elevation, Plate XI.

SOHUN LAL, DEL.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edmd. W. Smith

Archæological Surveyor N. W. P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. TILED PANELS ON THE EAST FAÇADE, SOUTH SIDE.

Marked J, J, on the Elevation, Plate XI.

FAZL-UD-DIN IL DEL.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edmd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : CHÎNÎ-KA-RAUZA. TILED PANELS ON THE EAST FAÇADE, SOUTH SIDE.

Marked I, I, on the Elevation, Plate XI.

RAM PRATAP II. & SOHUN LAL, DEL.

Inches 12 6 0 1 2 3 Feet

SCALE OF FEET

Edmd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

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AGRA—C

HALF ELEVATIO

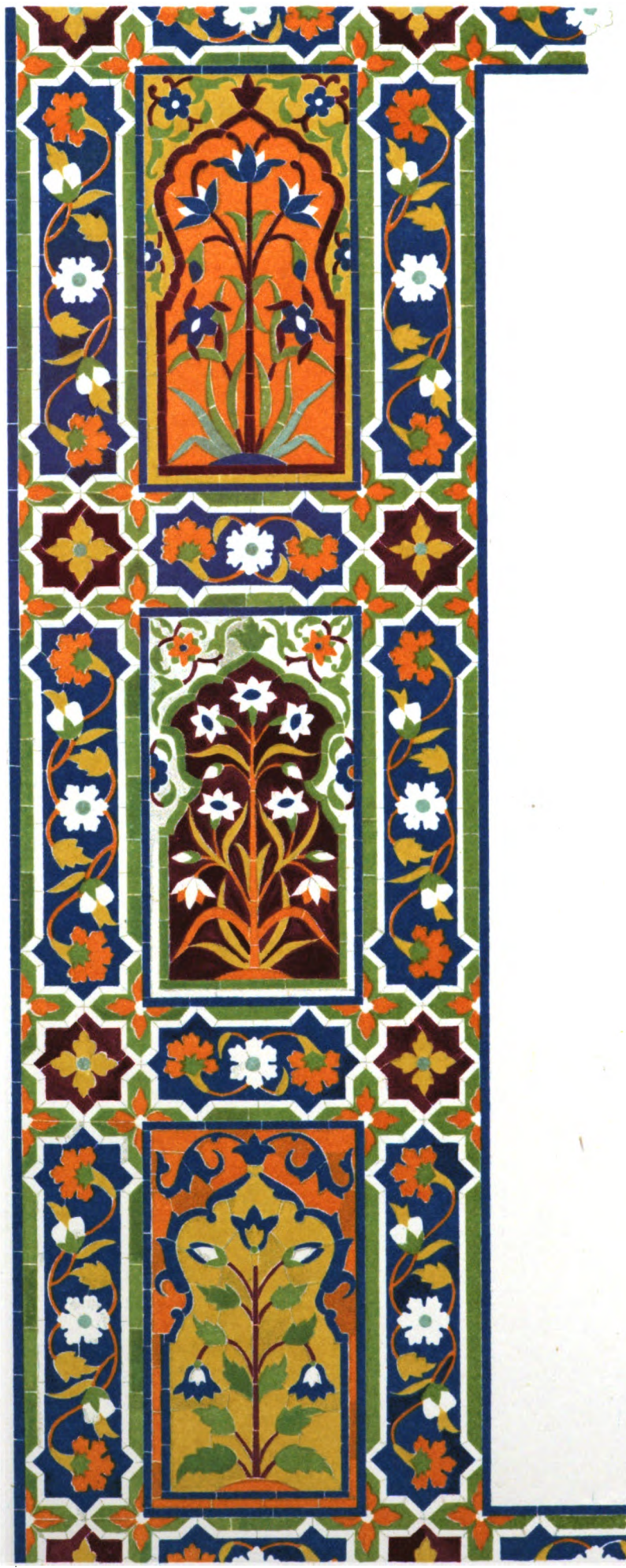
N.B.—For detail of panel marked A on the Elevation see Plate XXXI.
" " B " XXX.
" " C " XXXVII.
" " D " XXXVIII.
" " E " XXIX.
" " F " XXXV.
" " G " XXXVI.
" " H " XXXII.
" " I " XXVIII.
" " J " XXXIV.

Digitized by Google

Digitized by Google

AGRA: Chînî-ka-Rauza. Tiled Panels on the East Façade, South Side.

Marked E, E, on the Elevation, Plate XI.



Inches 0 6 1 2 3 4 Feet

SCALE OF FEET

RAM PRATAP II. DEL.

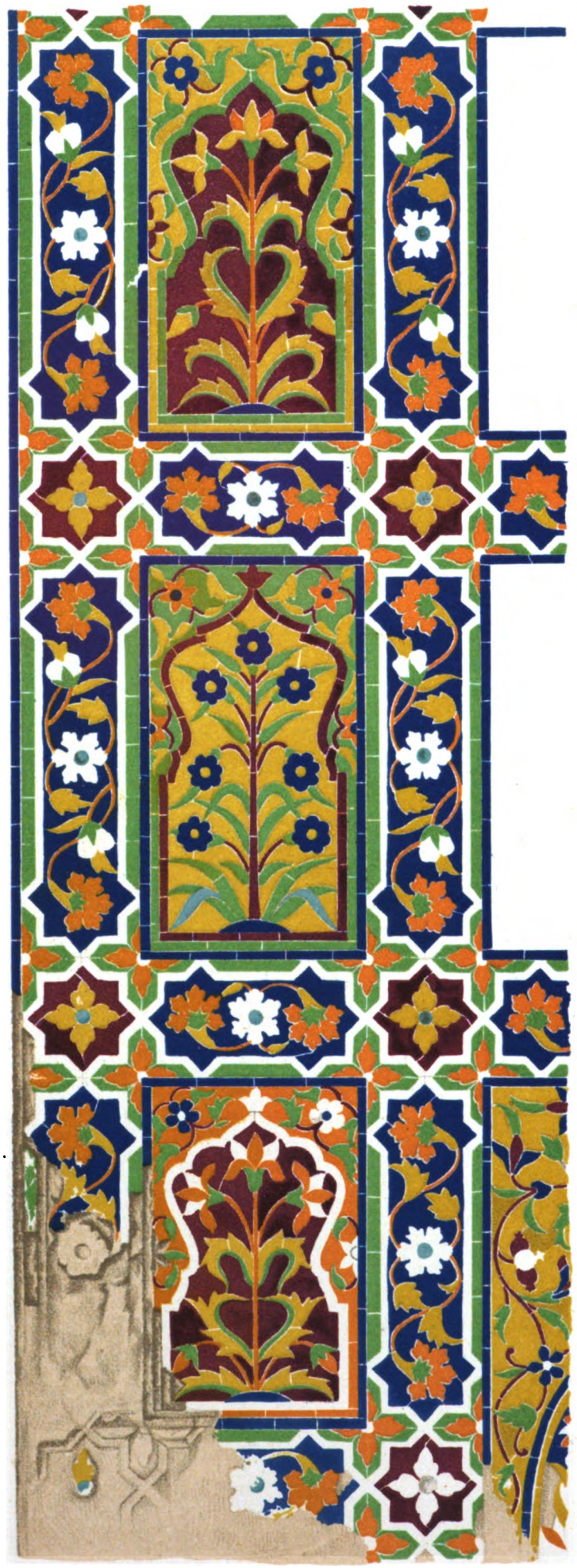
Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: Chînî-ka-Rauza. Tiled Panels on the East Façade, South Side.

Panels marked F, F, on the Elevation, Plate XI.



Inches 12 6 0 1 2 3 4 Feet

SCALE OF FEET

Edwd. W. Smith

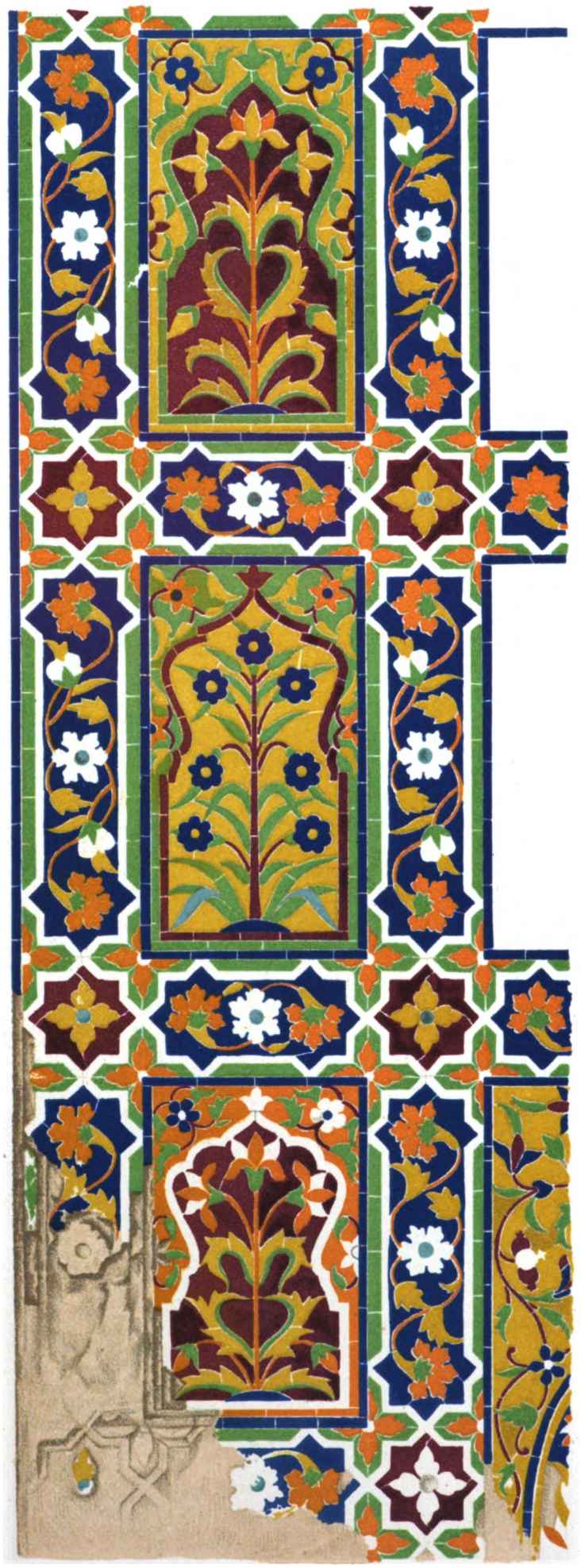
Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. TILED PANELS ON THE EAST FAÇADE, SOUTH SIDE.

Panels marked F, F, on the Elevation, Plate XI.



Inches 12 6 0 1 2 3 4 Feet

SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. TILED PANELS ON THE EAST FAÇADE, SOUTH SIDE.

Marked G, G, on the Elevation, Plate XI.

Inches 12 6 0 1 2 3 4 Feet

SCALE OF FEET

Edwin W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Tiled Panels on the North Facade, East Side.

Panel marked I on the Elevation, Plate XXIV.

SOHUN LAL, DEL.

Inches 12 6 2 3 Feet

SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Tiled Panels on the North Façade, East Side. PLATE XXIX.

Marked E, E. on the Elevation, Plate XXIV.

FAZUL-UD-DIN I., DEL.

Inches 2 6 1 2 3 Feet

SCALE OF FEET

Edmd W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. TILED PANELS ON THE NORTH FAÇADE, EAST SIDE.
Marked B, B, on the Elevation, Plate XXIV.

SOHUN LAL, DEL.

Inches 12 9 6 3 0 1 2 3 Feet

SCALE OF FEET

Edmd. Z. Smith

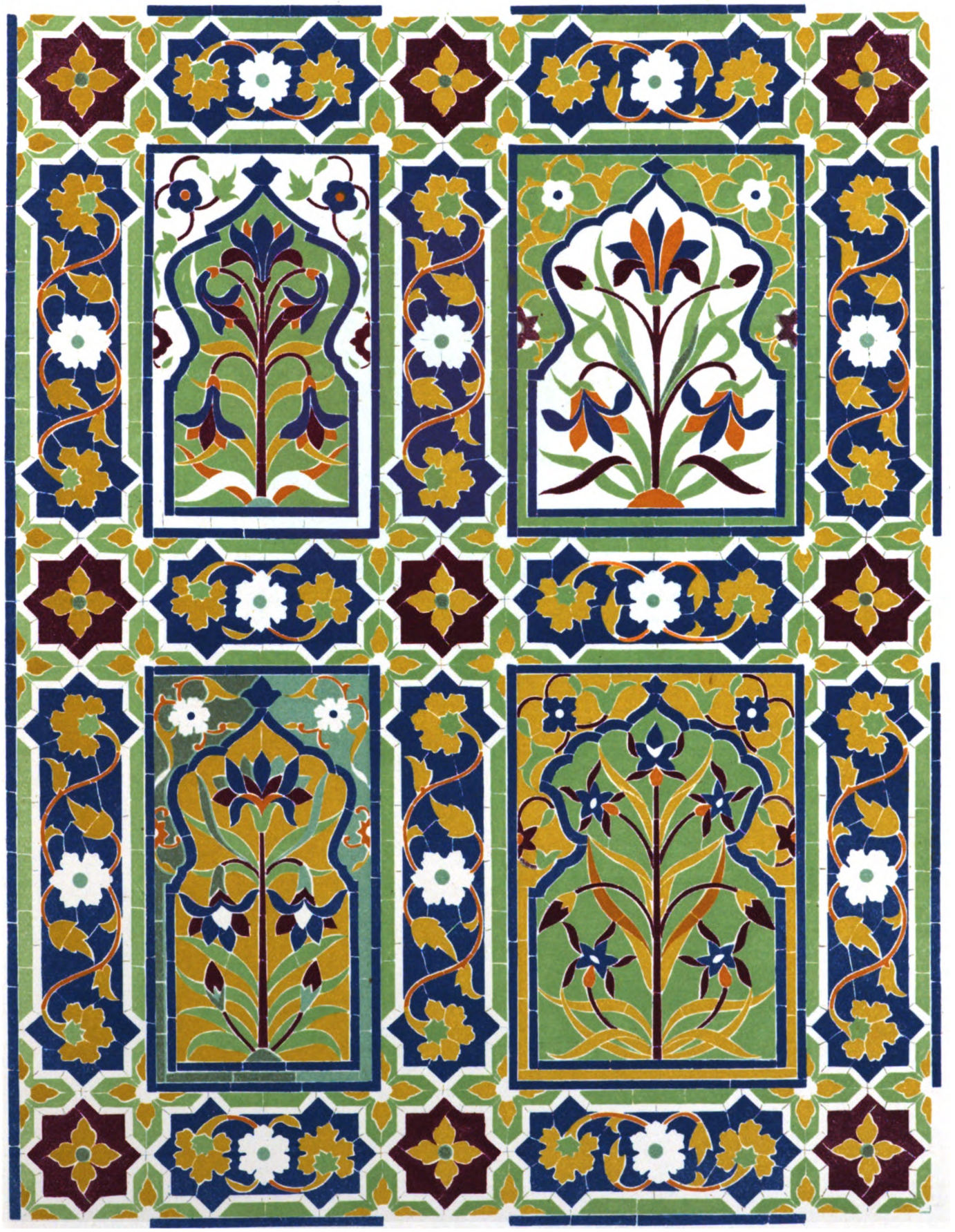
Archæological Surveyor N.W.P.

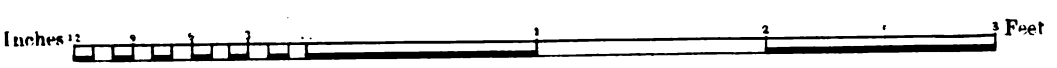
Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Tiled Panels on the North Façade, East Side.

Panels marked A, A, on the Elevation, Plate XXIV.





SCALE OF FEET

Edward Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : CHINI-KA-RAUZA. TILED PANELS ON THE NORTH FAÇADE, EAST SIDE.

Marked H, H, on the Elevation, Plate XXIV.

Inches 12 9 6 3 0 1 2 3 Feet

SCALE OF FEET

RAM PRATAP I. DEL.

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : CHINÎ-KA-RAUZA. TILED PANELS ON THE NORTH FAÇADE, EAST SIDE.

Marked K, K, on the Elevation, Plate XXIV.

Inches 12 9 6 3 0 1 2 3 Feet

SCALE OF FEET

Edmd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chinî-ka-Rauza. Tiled Panels on the North Façade, East Side.

Marked J, J, on the Elevation, Plate XXIV.

RAM SINGH, DEL.

Inches 12 6 1 2 3 Feet

SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. TILED PANELS ON THE NORTH FAÇADE, EAST SIDE.

Marked F, F, on the Elevation, Plate XXIV.

FAZL-UD-DIN II. DEL.

Inches 12 6 1 2 3 Feet

SCALE OF FEET

Edwd. Le Fanu

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. TILED PANELS ON THE NORTH FAÇADE, EAST SIDE.

Marked G, G, on the Elevation, Plate XXIV.

RAM SINGH & FAZL-UD-DIN I. DEL.

Inches 12 9 6 3 0 1 2 3 Feet

SCALE OF FEET

Edmd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. TILED PANELS ON THE NORTH FAÇADE, EAST SIDE.

Marked C, C, on the Elevation, Plate XXIV.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edmd W. Smith

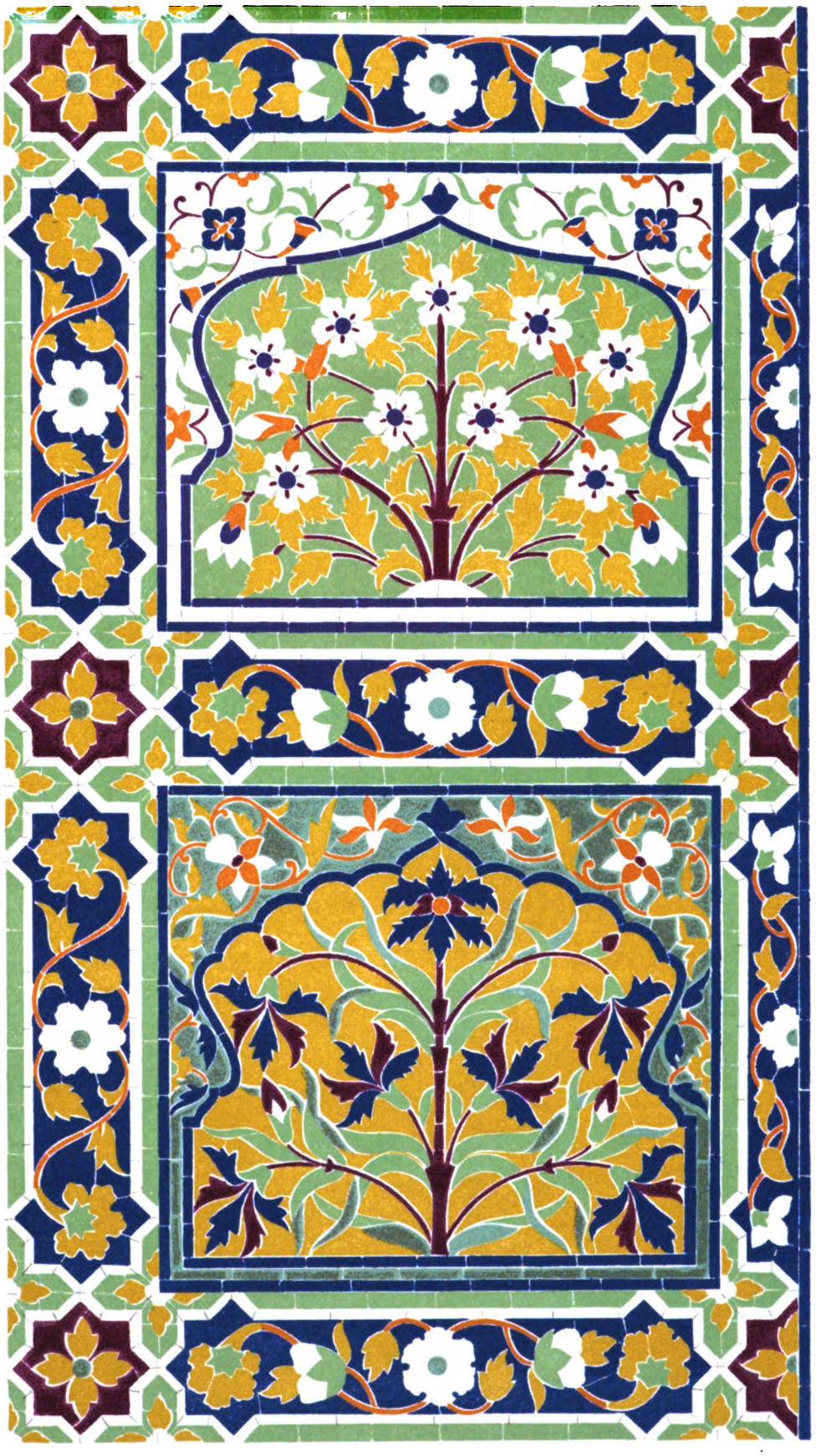
Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Tiled Panels on the North Façade, East Side.

Panels marked D, D, on the Elevation, Plate XXIV.



FAZL-UD-DIN II. DEL.

Inches 12 9 6 3 0 1 2 3 Feet

SCALE OF FEET

Edward W Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chíní-ka-Rauza. Tiled Panels on the West Façade, North End.

[Over the ground floor doorway].

SOHUN LAL, DEL.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edward Balfour

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Tiled Panels on the West Façade, North End.

[On the side of the Northern entrance].

RAM PRATAP II. DEL.

Inches 0 6 2 3 Feet

SCALE OF FEET

Edward. Balfour

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : CHINI-KA-KAUZA. TILED PANELS ON THE WEST FAÇADE, FORT.

[Below the first floor window]

FAZL-UD-DIN IL DEL.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edmd. Smith

Archæological Surveyor N.W.P.

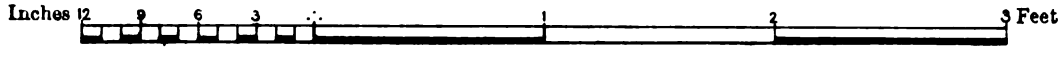
Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Tiled Panels on the West Façade, North End.

[On the sides of the first floor windows—below the cornice].

RAM PRATAP I. & SOHUN LAL, DEL.



SCALE OF FEET

Edmund W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : CHÎNÎ-KA-RAUZA. TILED PANELS ON THE WEST FAÇADE, NORTH END.

[Archway over the ground floor doorway].

SOHUN LAL, DEL.

Inches 2 6 1 2 3 Feet

SCALE OF FEET

Edwd. W. Smith

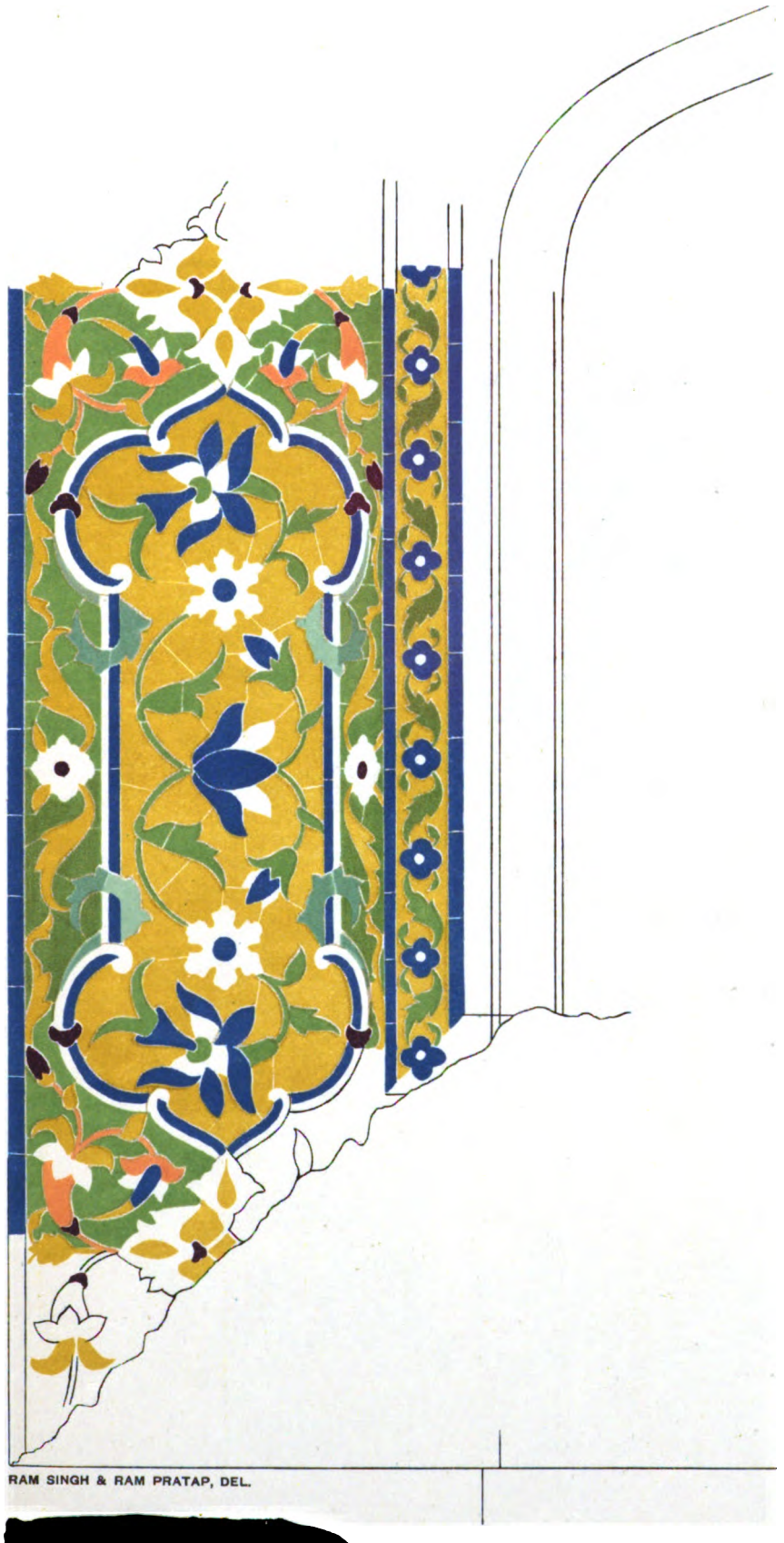
Archæological Surveyor N.W.P.

Digitized by Google

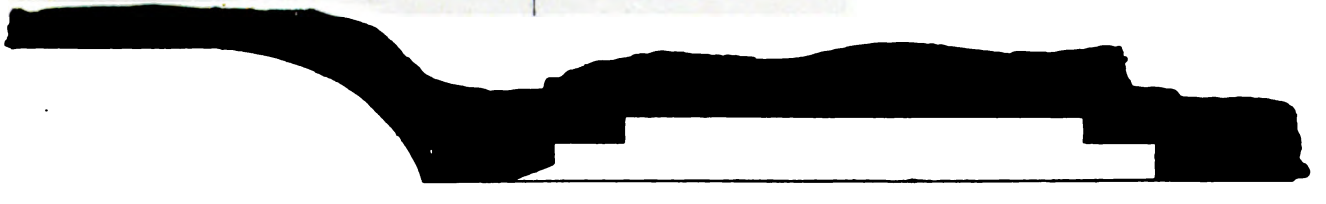
Digitized by Google

AGRA: Chînî-ka-Rauza. The Western Vestibule.

Tiling upon the cornice and intrados of the main archway.



RAM SINGH & RAM PRATAP, DEL.



Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edward Lovett

Archæological Surveyor N.W.P.

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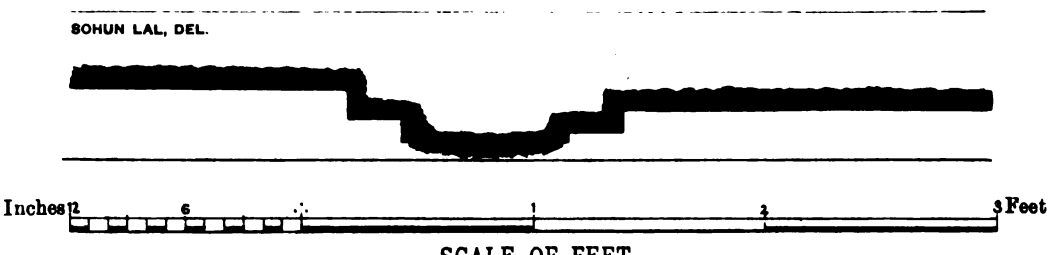
AGRA : Chînî-ka-Rauza. The Western Vestibule

Colour Decoration upon the ceiling.

SOHUN LAL, DEL.



SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

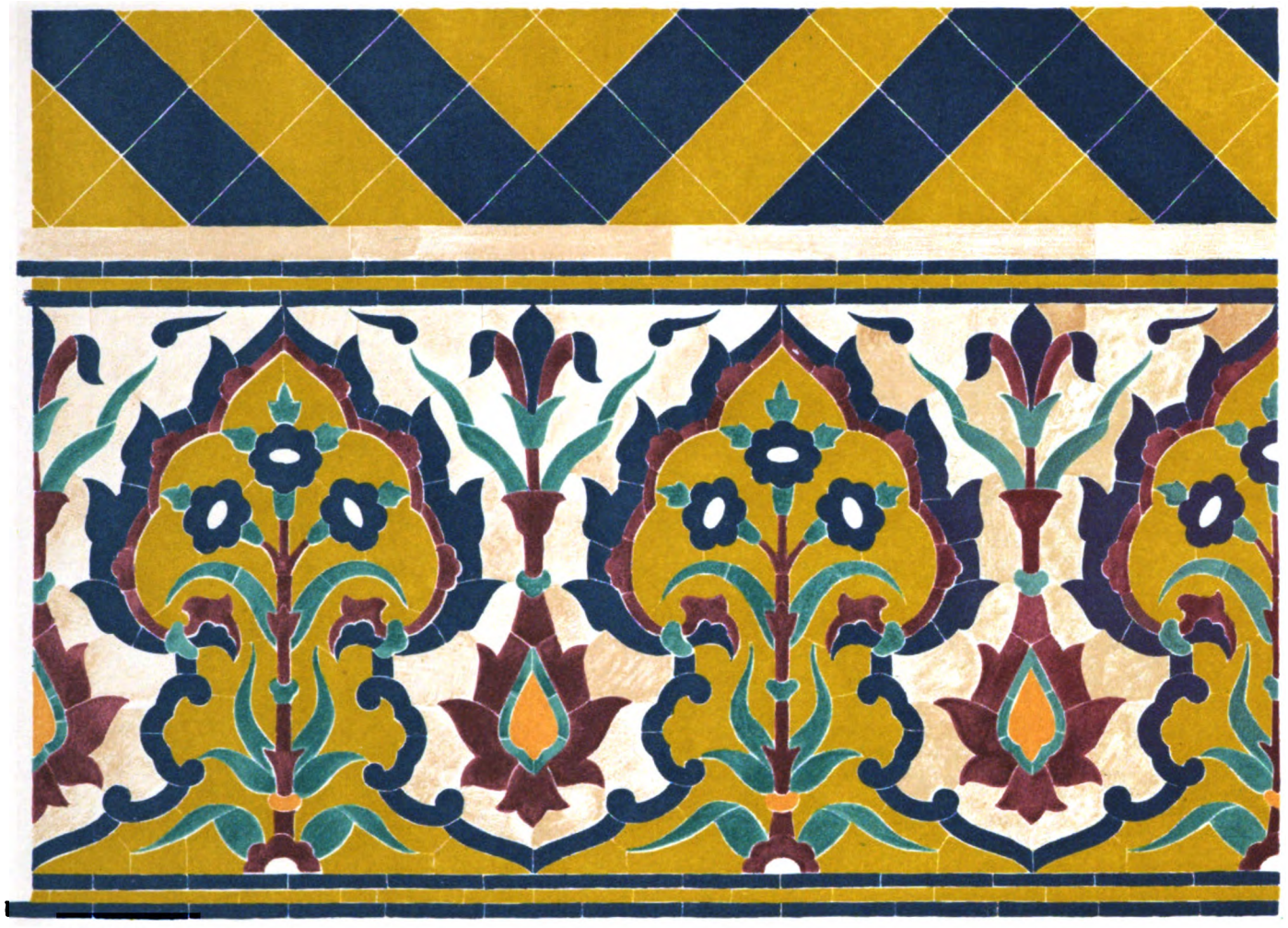
Digitized by Google

PLATE XLVI.

LENGTH ROUND THE BASE OF THE DOME.

Digitized by Google

AGRA : Chíní-ka-Rauza. Detail of Tiled Frieze round the Base of the Dome.



RAM PRATAP I. DEL.

Section

Inches 12 6 1 2 3 Feet

SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

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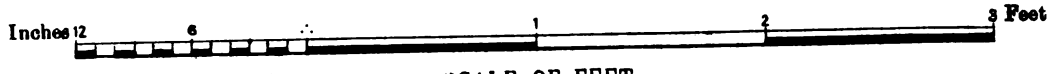
AGRA: Chînî-ka-Rauza. Detail of Tiled Cornice round the Base of the Dome.

Section



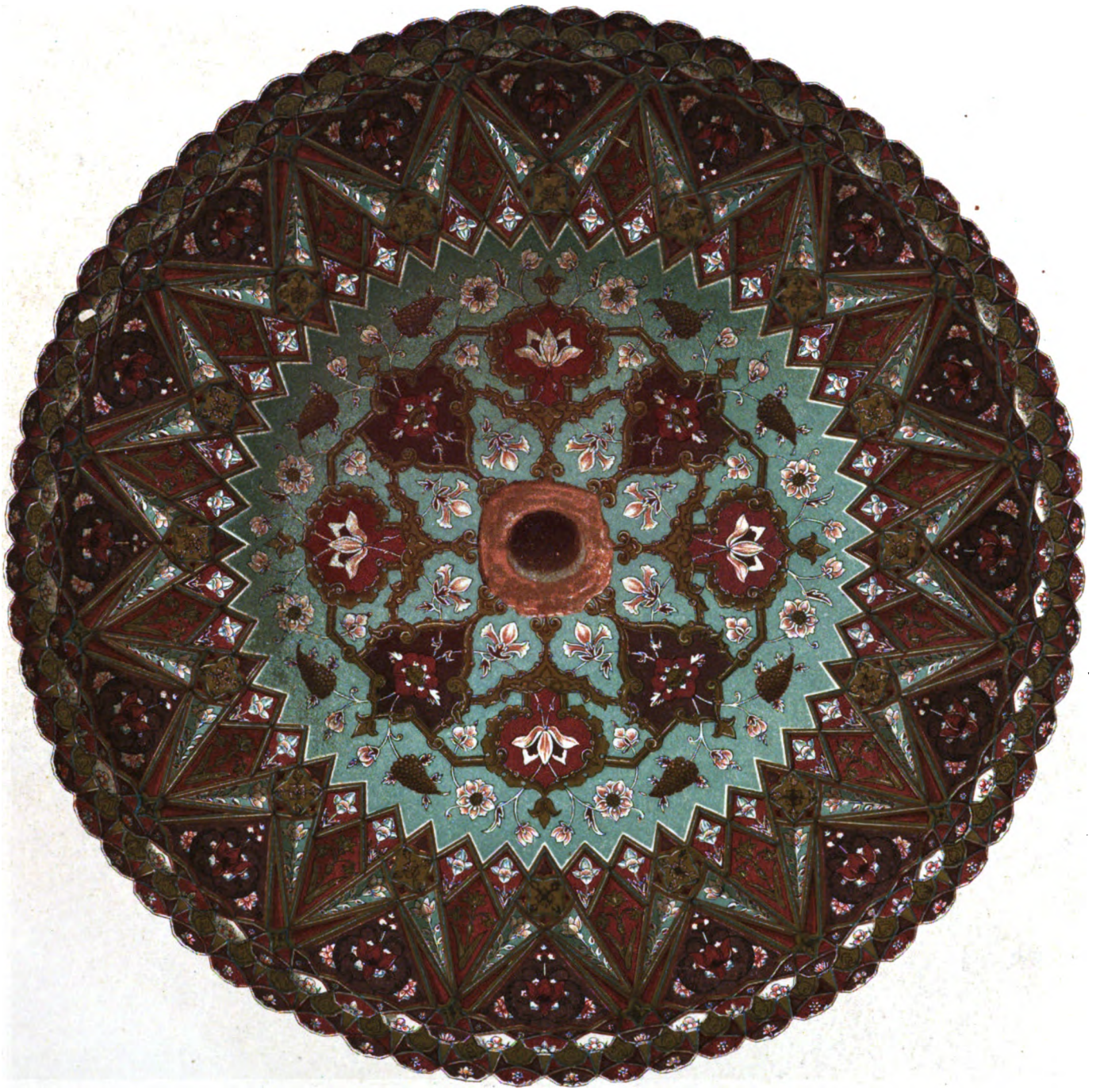
SCALE OF FEET

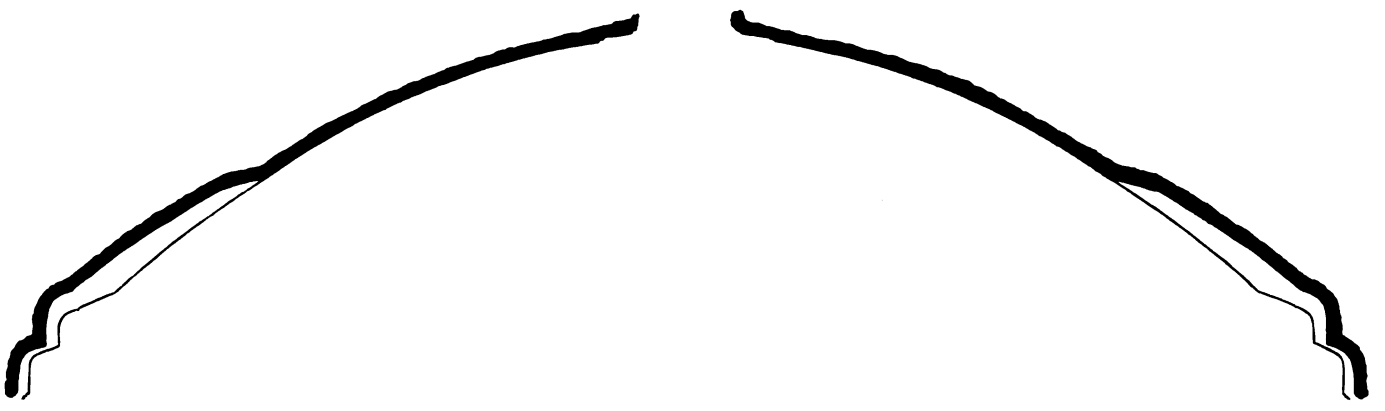
Edwd. W. Smith
Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : CHÎNÎ-KA-RAUZA. COLOURED DECORATION UPON THE MEDALLION IN THE CROWN OF THE DOME.





BHAIRAV BAKHSH, DEL. Section Edwd. W. Smith

Inches 12 1 2 3 4 5 6 7 8 9 Feet

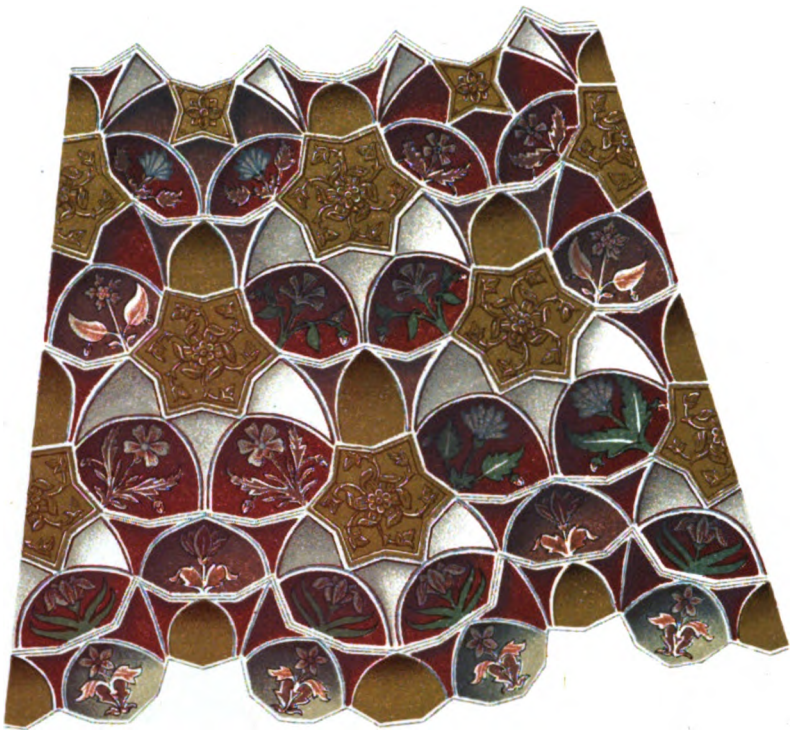
SCALE OF FEET

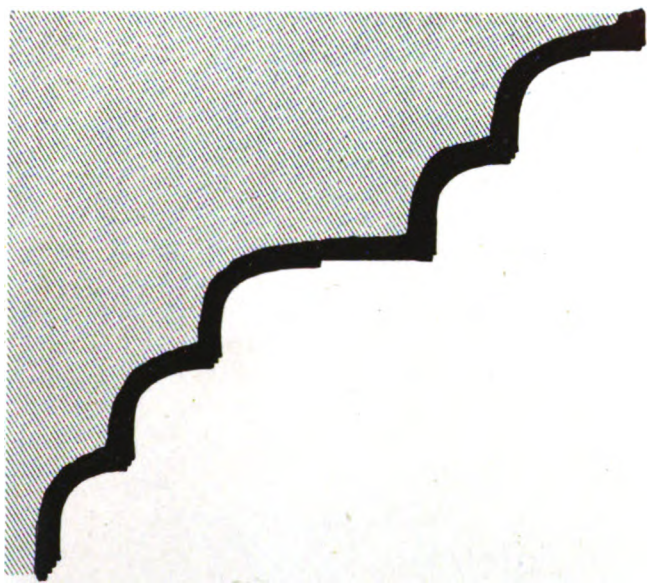
Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Coloured Decoration upon the Soffit of the Dome.

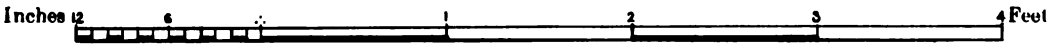




Section

Elevation

BHAIRAV BAKSH, DEL.



SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

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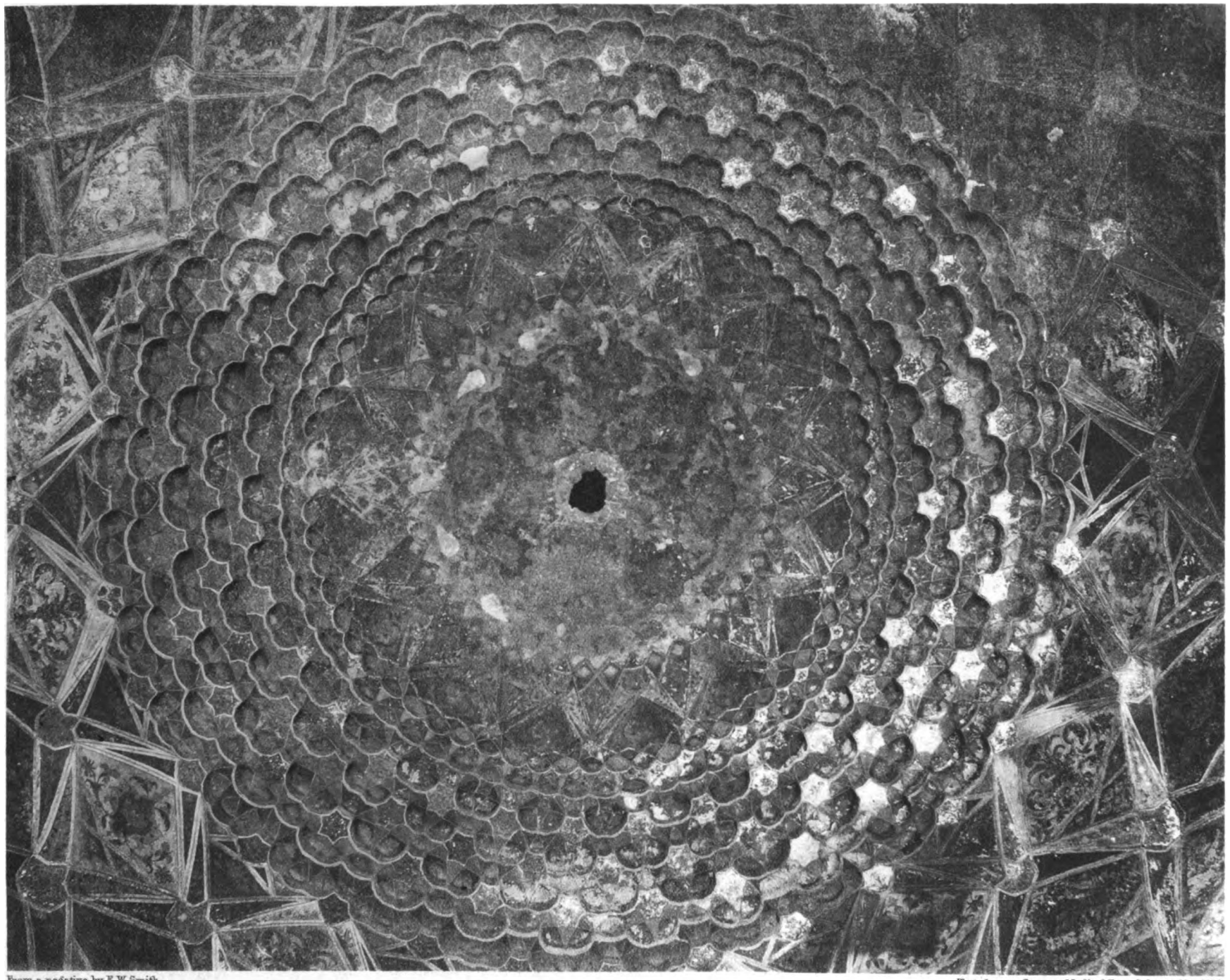


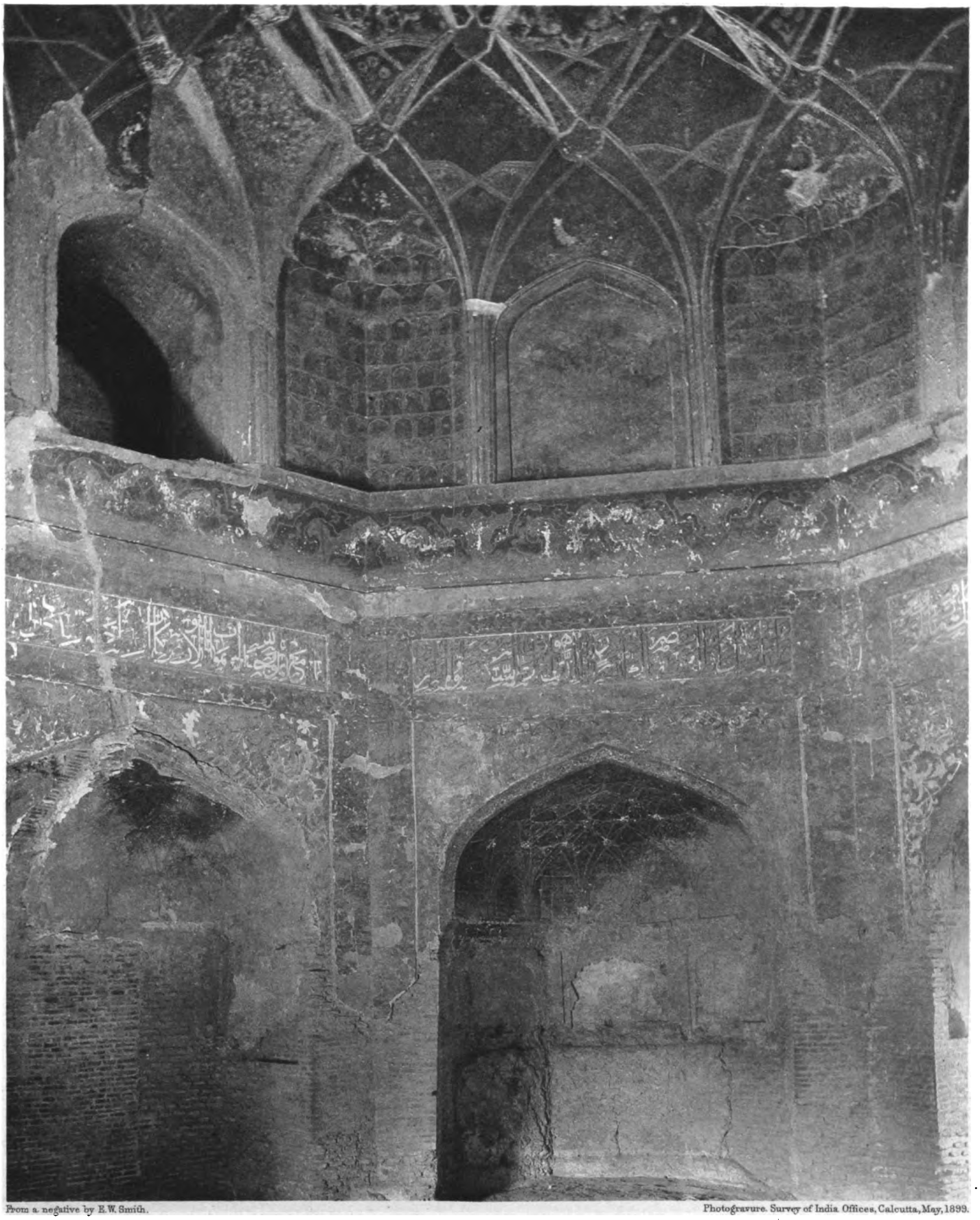
From a negative by E.W. Smith.

Photogravure. Survey of India. Offices, Calcutta, May, 1899.

AGRA.— CHÎNÎ-KA-RAUZA.
THE CROWN OF THE DOME LOOKING UP FROM THE FLOOR OF THE CENOTAPH CHAMBER.

Digitized by Google

Digitized by Google



From a negative by E.W. Smith. Photogravure. Survey of India Offices, Calcutta, May, 1899.

AGRA.- THE CHÎNÎ-KA-RAUZA.
INTERIOR VIEW OF THE LOWER PORTION OF THE CENOTOPH CHAMBER.

Digitized by Google

Digitized by Google

AGRA : CHÎNÎ-KA-RAUZA. DETAIL OF COLOUR DECORATION UPON THE SOFFIT OF THE DOME (SPRINGING).

BHAIRAV BAKHSH, DEL.

Inches 12 6 0 2 3 Feet

SCALE OF FEET

Edmd. W. Smith

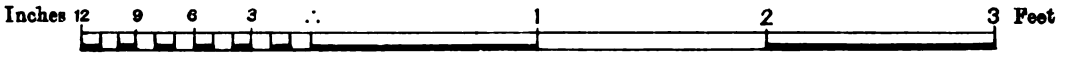
Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA: CHÎNÎ-KA-RAUZA. COLOUR DECORATION UPON THE SOFFIT OF THE DOME (SPRINGING).

BHAIRAV BAKHSH & RAM SINGH, DEL.



SCALE OF FEET

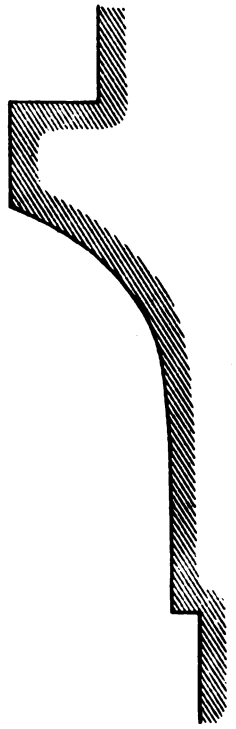
Edmund W. Smith

Archæological Surveyor N.W.P.

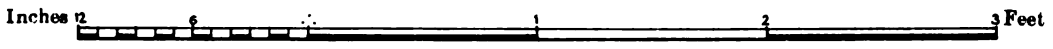
Digitized by Google

Digitized by Google

AGRA : Chíní-ka-Rauza. Detail of Decorated Cornice round the interior of the Cenotaph Chamber.



Section



SCALE OF FEET

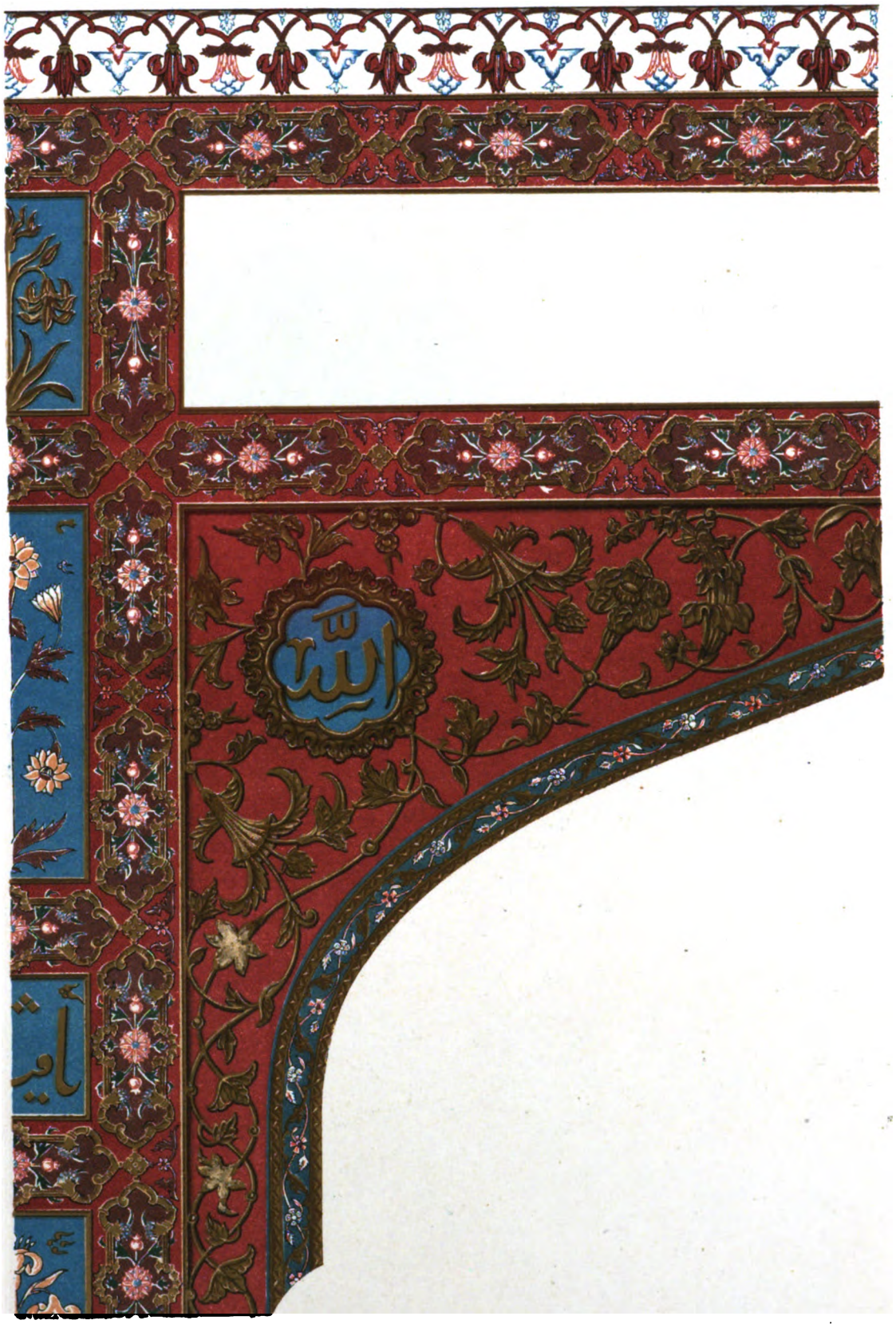
Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : Chînî-ka-Rauza. Decorated Spandrils over the arched recesses on the Ground Floor of the Cenotaph Chamber.



BHAIRAV BAKHSH, DEL.

Inches 0 1 2 3 Feet

SCALE OF FEET

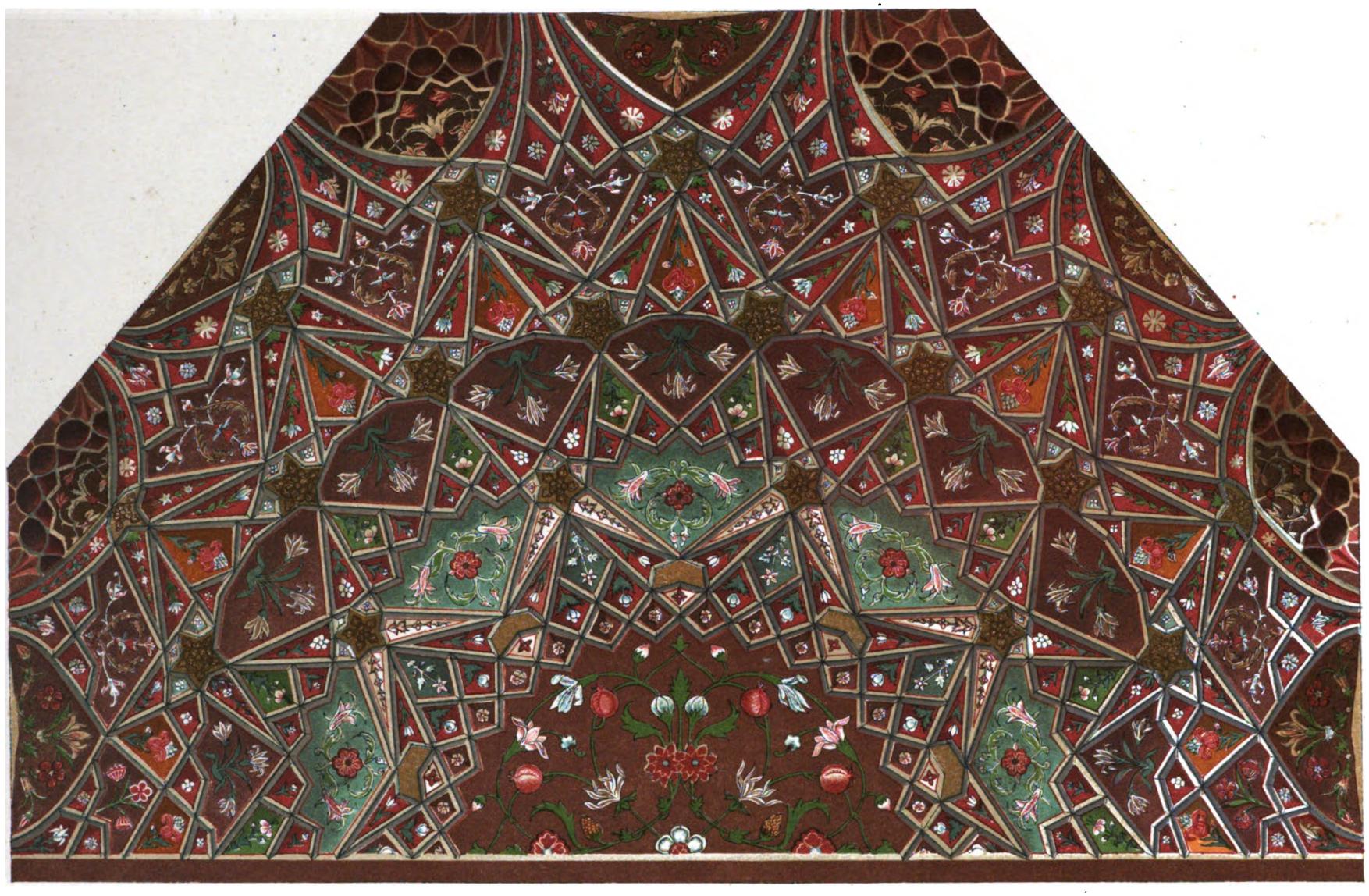
Edmd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

AGRA : CHÎNÎ-KA-RAUZA. PAINTED DECORATION UPON THE SOFFITS OF THE ANGLE-BAYS, OR ALCOVES, IN THE CORNERS OF THE CENOTAPH CHAMBER.



RAM SINGH & BHAIRAV BAKHSH, DEL.

Edmd. W. Smith

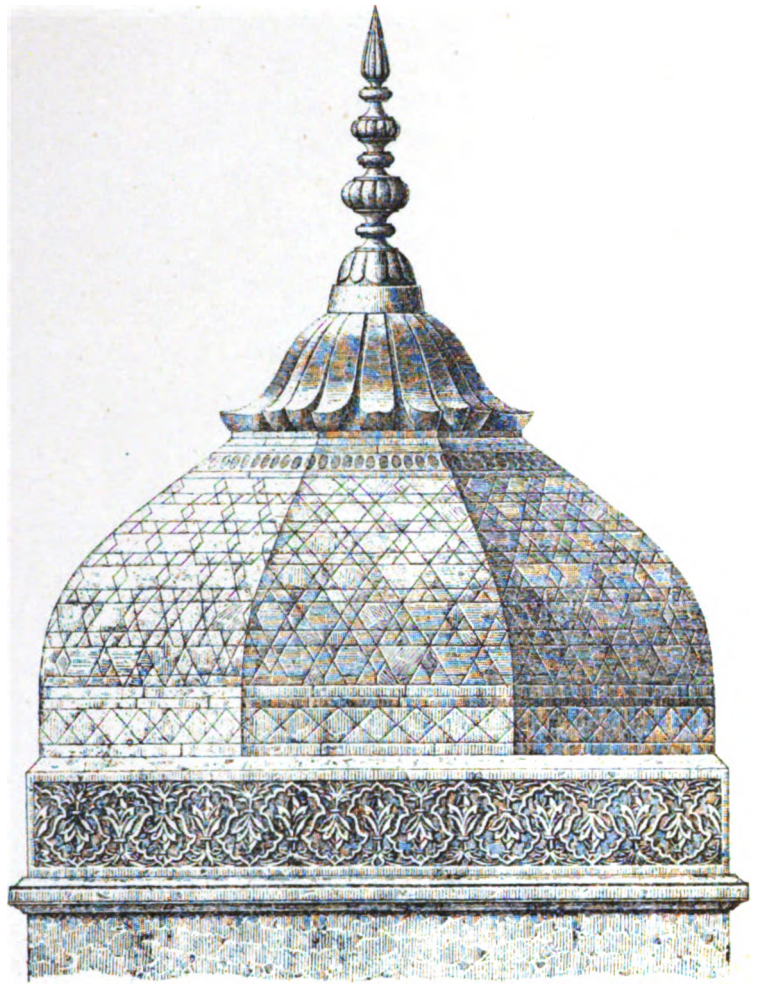
Archæological Surveyor N.W.P.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Digitized by Google

Digitized by Google



FAZL-UD-DIN I.
BHAIRAV BAKSH.

SCALE OF FEET

SCALE

Edwd. W. Smith

Archæological Surveyor N.W.P.

Digitized by Google

Digitized by Google

SIKANDRA: Akbar's Tomb. Tiled Ornamentation upon the Kiosques round the Third Floor.

Fig. 2.

Fig. 1.

Fig. 3.

Fig. 4.

Inches 12 9 6 3 1 Foot

SCALE

Edwd. Th. Lovett

Archæological Surveyor N.W.P.

BHAIRAV BAKHSH & FAZL-UD-DIN II. DEL.

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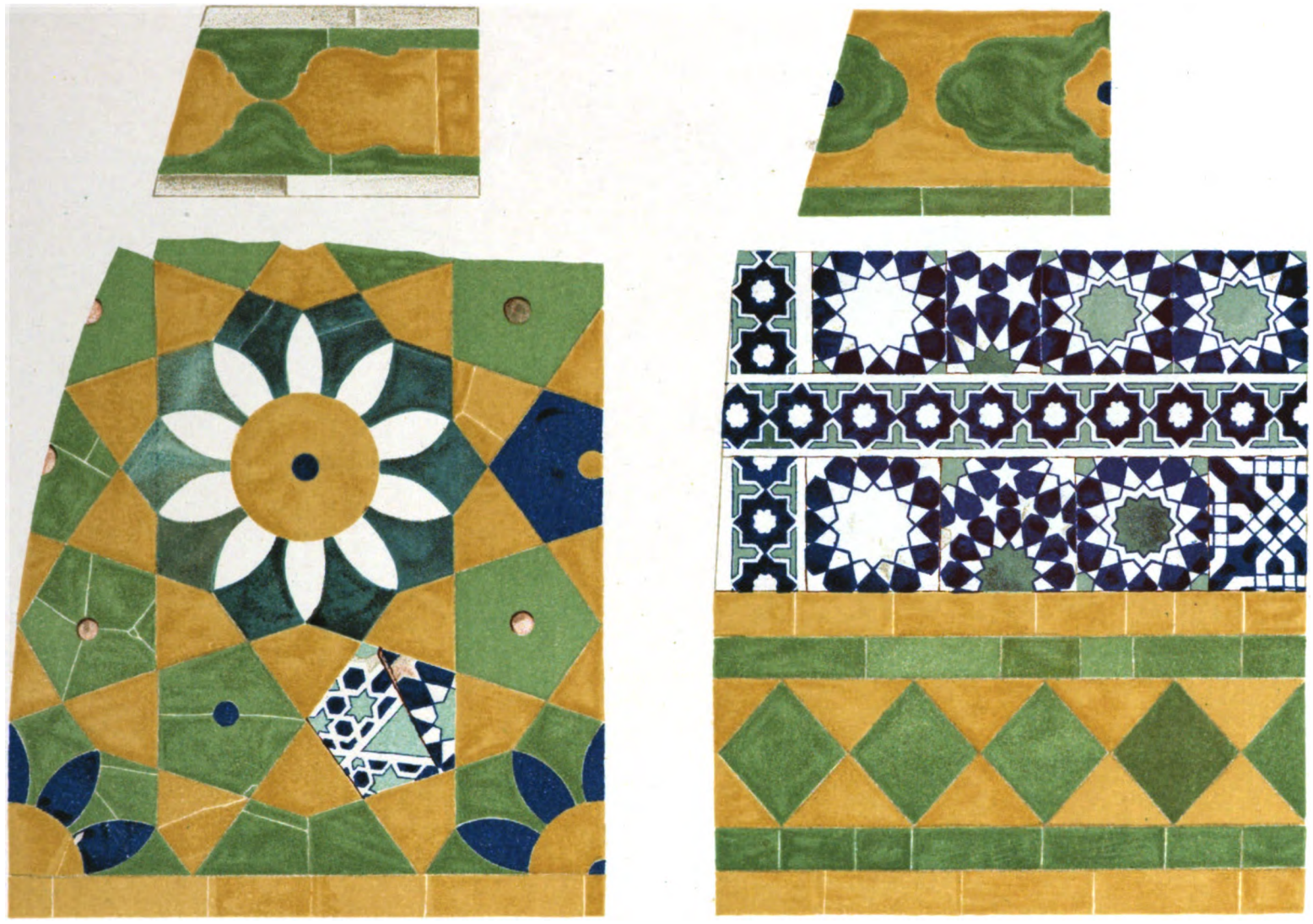
SIKANDRA: Akbar's Tomb. Tiled Ornamentation upon the Kiosques round the Third Floor.



BHAIRAV BAKHSH & FAZL-UD-DIN del.

Inches 12 9 6 3 0 1 Foot

SCALE

Edmund W. Smith

Archæological Surveyor N.W.P.

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SIKANDRA: Akbar's Tomb. Tiled Ornamentation upon the Kiosques round the Third Floor.

Fig. 1.

Fig. 2.

Inches 12 9 6 3 1 Foot

SCALE

BHAIRAV BAKHSH & FAZL-UD-DIN II. DEL.

Edmund W. Smith

Archæological Surveyor N.W.P.

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SIKANDRA: Akbar's Tomb. Tiled Ornamentation upon the Kiosques round the Third Floor.

BHAIRAV BAKHSH & FAZL-UD-DIN II. DEL.

Inches 12 9 6 3 0 1 Foot

SCALE

Edwd. W. Smith

Archæological Surveyor N.W.P.

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AGRA: ITIMAD-UD-DAULAH'S TOMB. MOSAIC PAVEMENT ON THE UPPER FLOOR.

RAM SINGH & BHAIRAV BAKHSH, DEL.

Inches 12 6 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 Feet

SCALE OF FEET

Edmd. W. Smith

Archæological Surveyor N.W.P.

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Digitized by Google

AGRA: ITIMAD-UD-DAULAH'S TOMB. DETAILS OF MOSAIC BORDERS ROUND THE CENOTAPHS AND MOSAIC PAVEMENT ON THE UPPER FLOOR.

PLATE LXV.

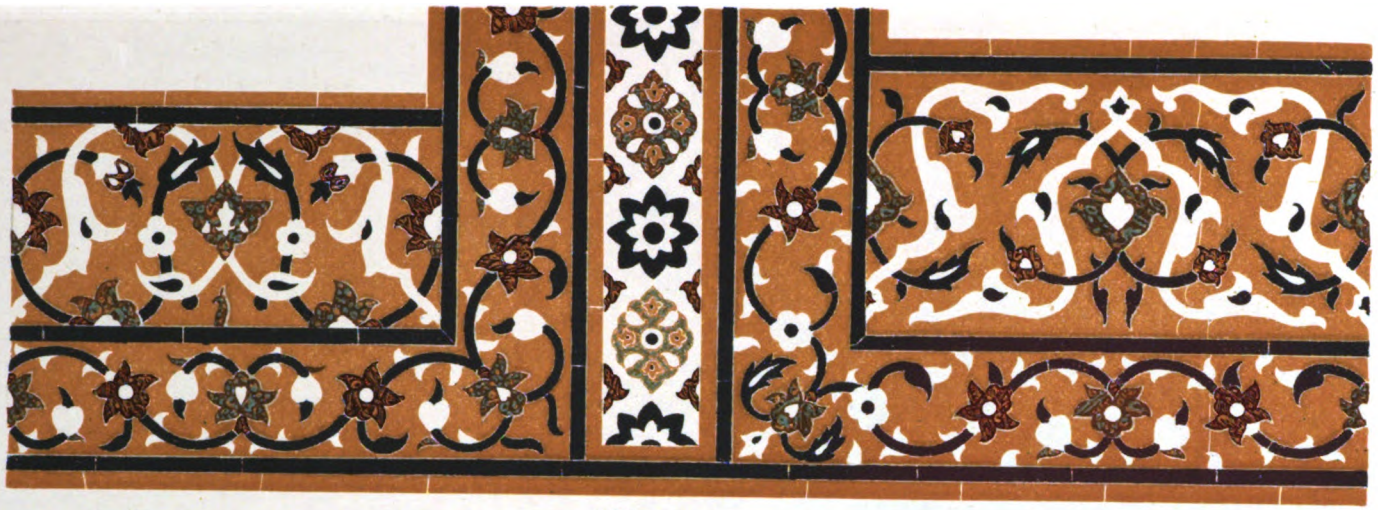
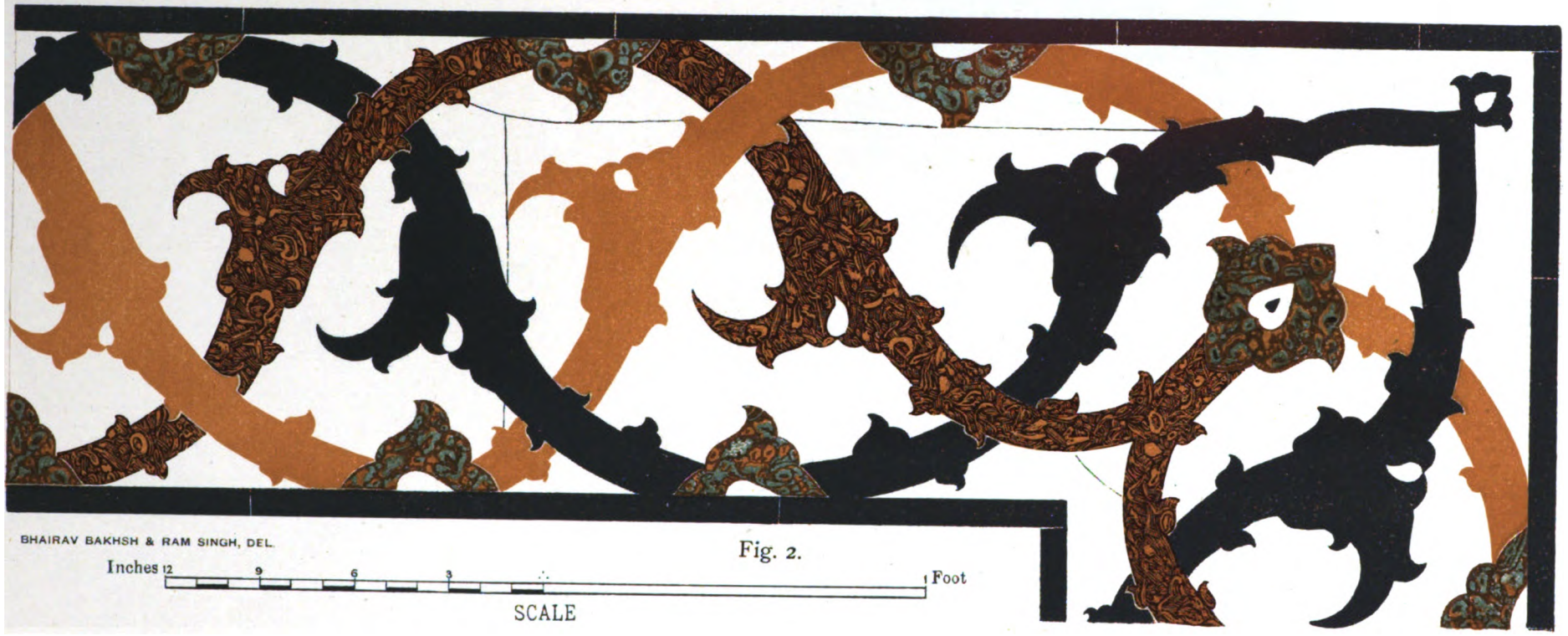


Fig. 1.

Inches 12 9 6 3 Foot

SCALE



BHAIRAV BAKHSH & RAM SINGH, DEL.

Fig. 2.

Inches 12 9 6 3 Foot

SCALE

Edmund W. Smith

Archæological Surveyor N.W.P.

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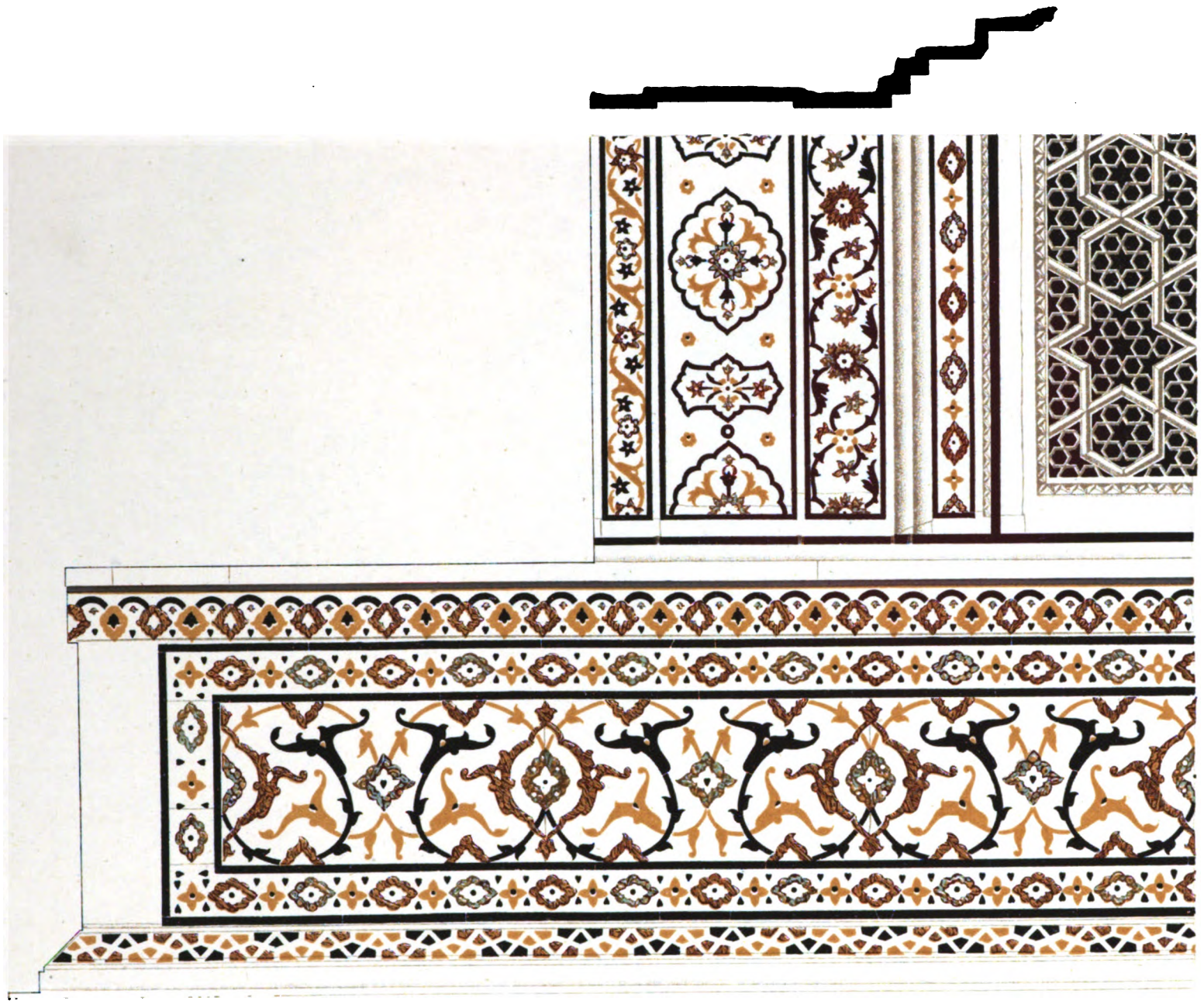
AGRA: Itimad-ud-daulah's Tomb. Inlaid Ornamentation upon the Plinth of the Upper Floor.



BHAIRAV BAKHSH & FAZL-UD-DIN II. DEL.

Inches 12 9 6 3 1 2 3 Feet

SCALE OF FEET

Edwd. W. Smith

Archæological Surveyor N.W.P.

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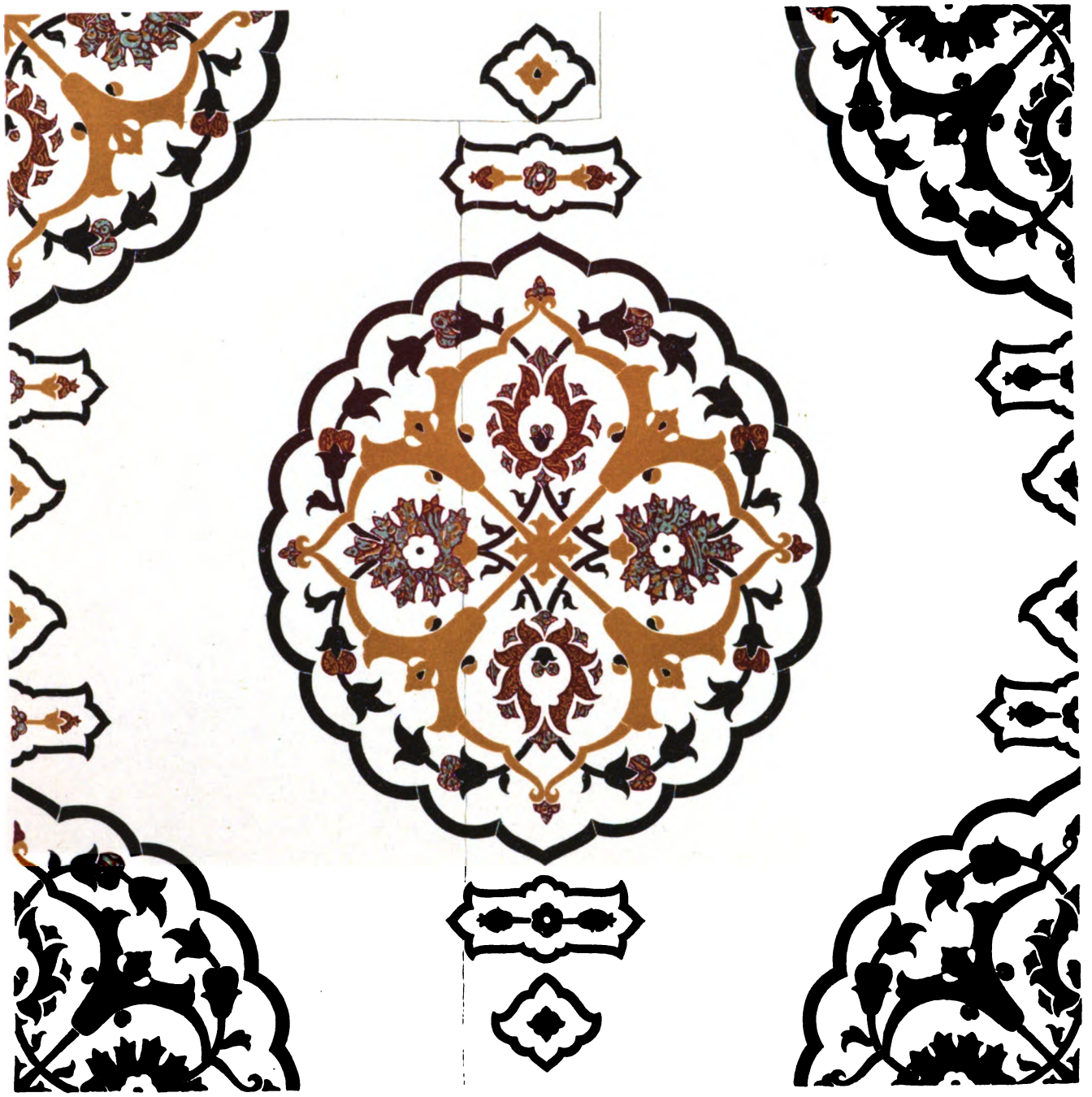
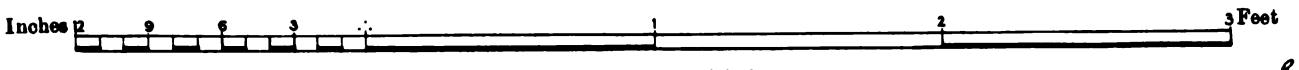
AGRA: ITIMAD-UD-DAULAH'S TOMB. INLAID ORNAMENTATION UPON THE UPPER PART OF THE TURRETS UPON THE ANGLES OF THE BUILDING.



BHAIRAV BAKHSH & FAZL-UD-DIN II. DEL.



SCALE OF FEET

Edmd. W. Smith

Archæological Surveyor N.W.P.

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From a negative by E. W. Smith.

Photogravure. Survey of India Offices, Calcutta, May, 1899.

AGRA: I'TMAD-UD-DAULAH'S TOMB. GENERAL VIEW

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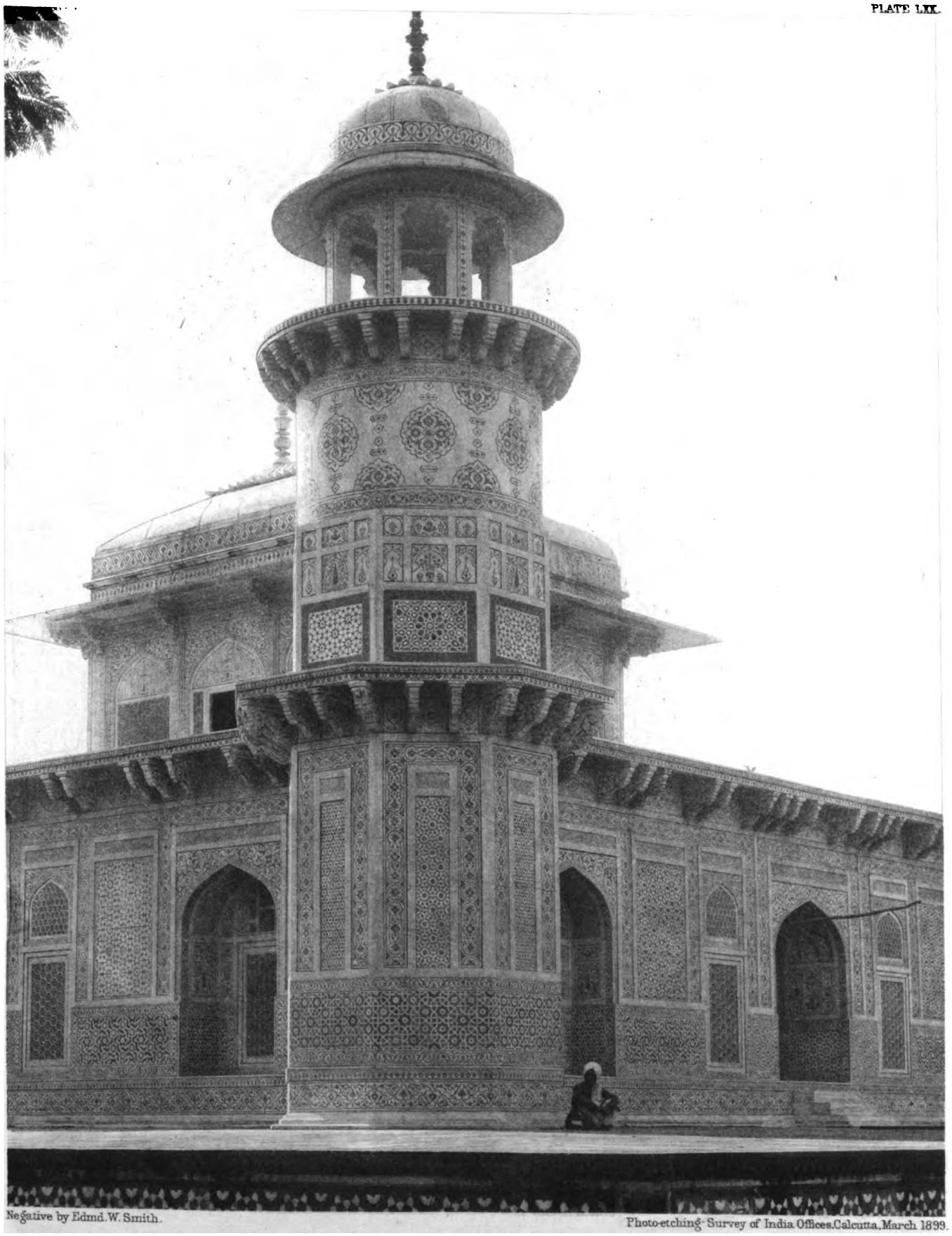
Digitized by Google



Negative by Edmd. W. Smith. Photo-etching Survey of India Offices, Calcutta, March 1899.

AGRA: ITIMÂD-UD-DAULAH'S TOMB - VIEW OF TURRETS AT THE CORNER OF THE TOMB.

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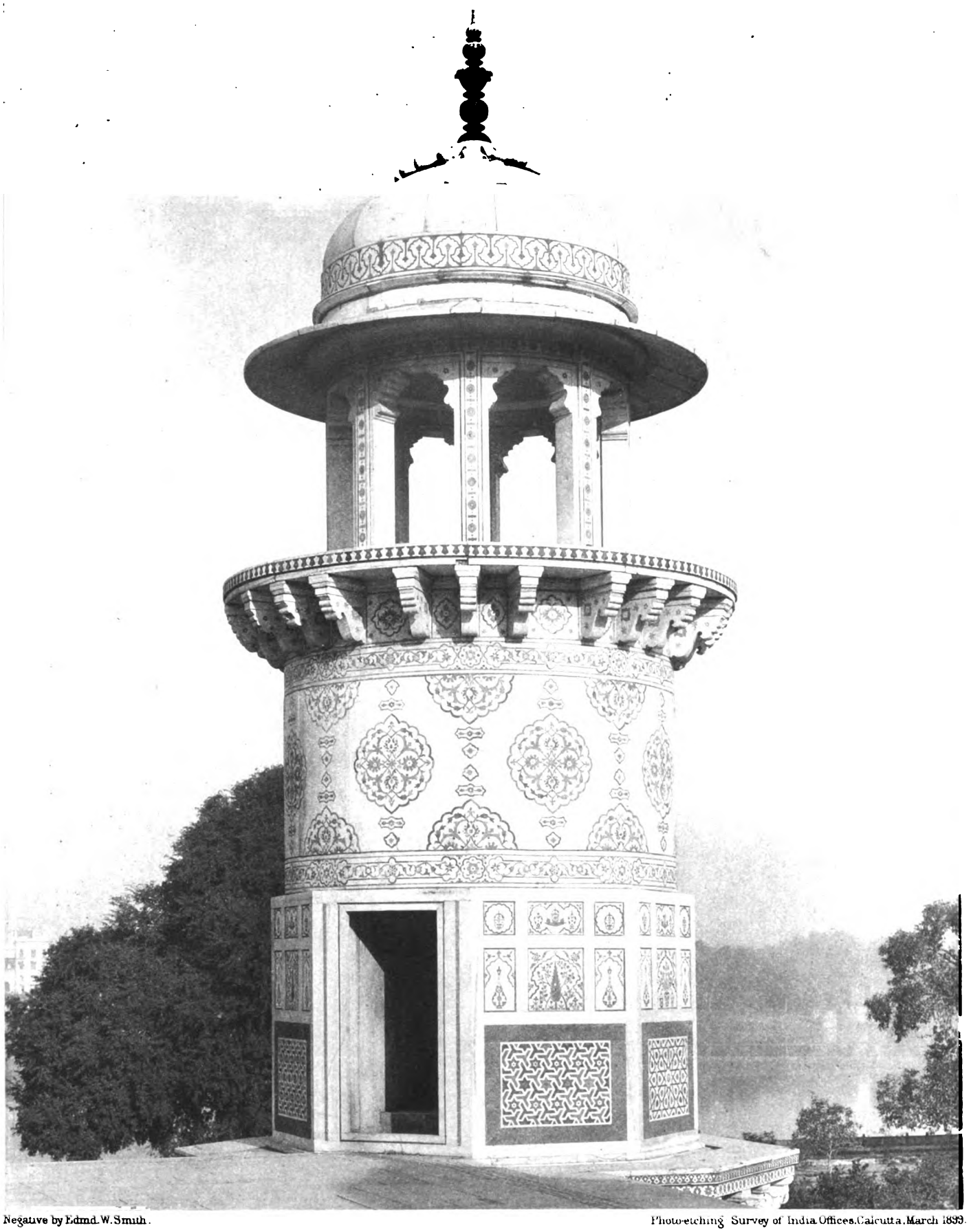
Digitized by Google



Negative by Edmd. W. Smith.

Photo-etching Survey of India Offices, Calcutta, March 1893.

AGRA: ITIMÂD-UD-DAULAH'S TOMB - MARBLE TURRETS AT THE CORNER OF THE TOMB - UPPER PART.

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Negative by Edmd. W. Smith.

Photo-etching-Survey of India Offices, Calcutta, April 1899.

AGRA: ITIMÂD-UD-DAULAH'S TOMB. INLAID PANEL ON THE UPPER PART OF ONE OF THE MARBLE TURRETS AT THE CORNER OF THE TOMB (SEE PLATE LXXI.)

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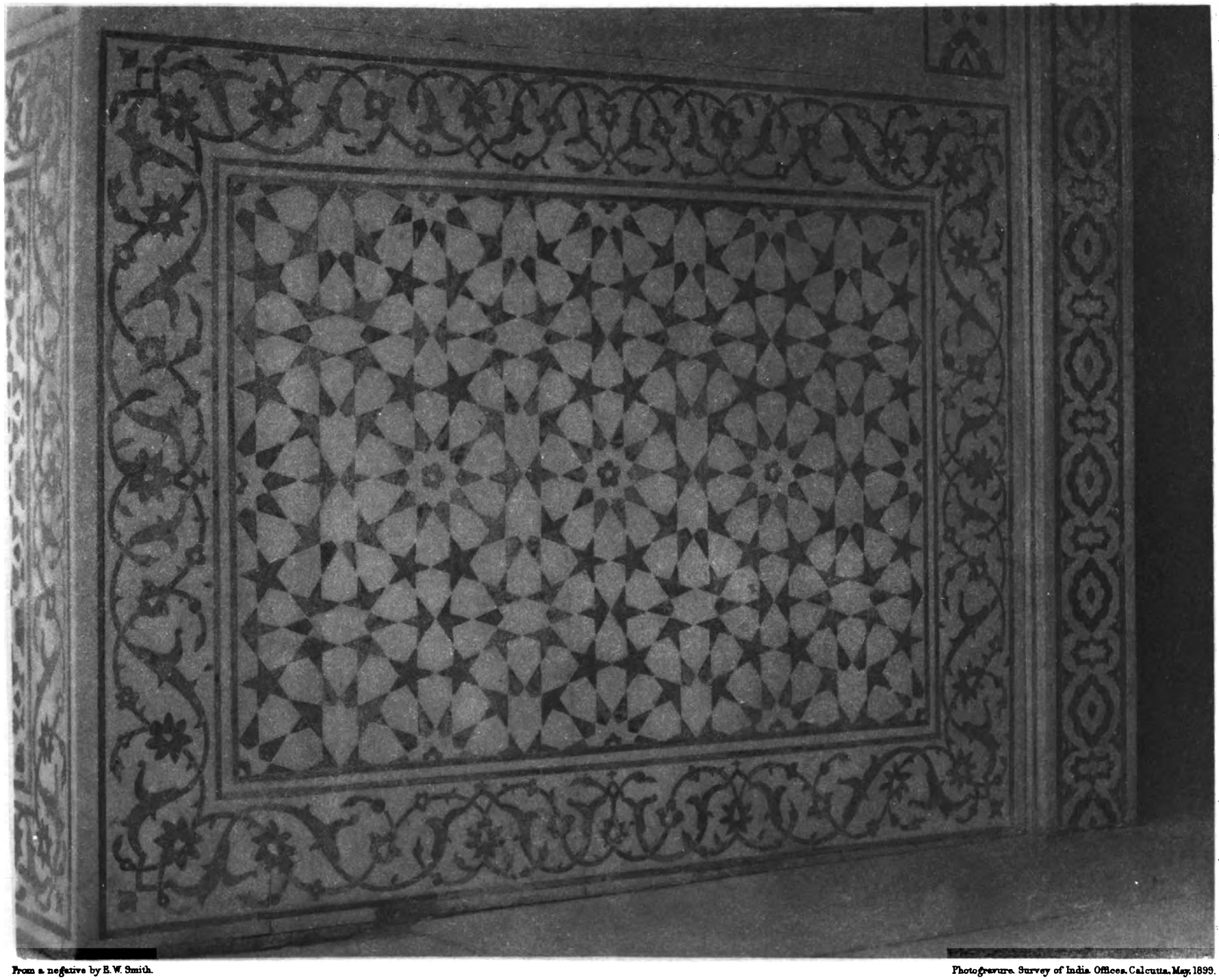

From a negative by E. W. Smith.

Photogravure. Survey of India Offices. Calcutta, May, 1899.

AGRA: ITIMÂD-UD-DAULAH'S TOMB.
INLAID MARBLE DADO UPON SIDES OF ENTRANCES TO THE TOMB.

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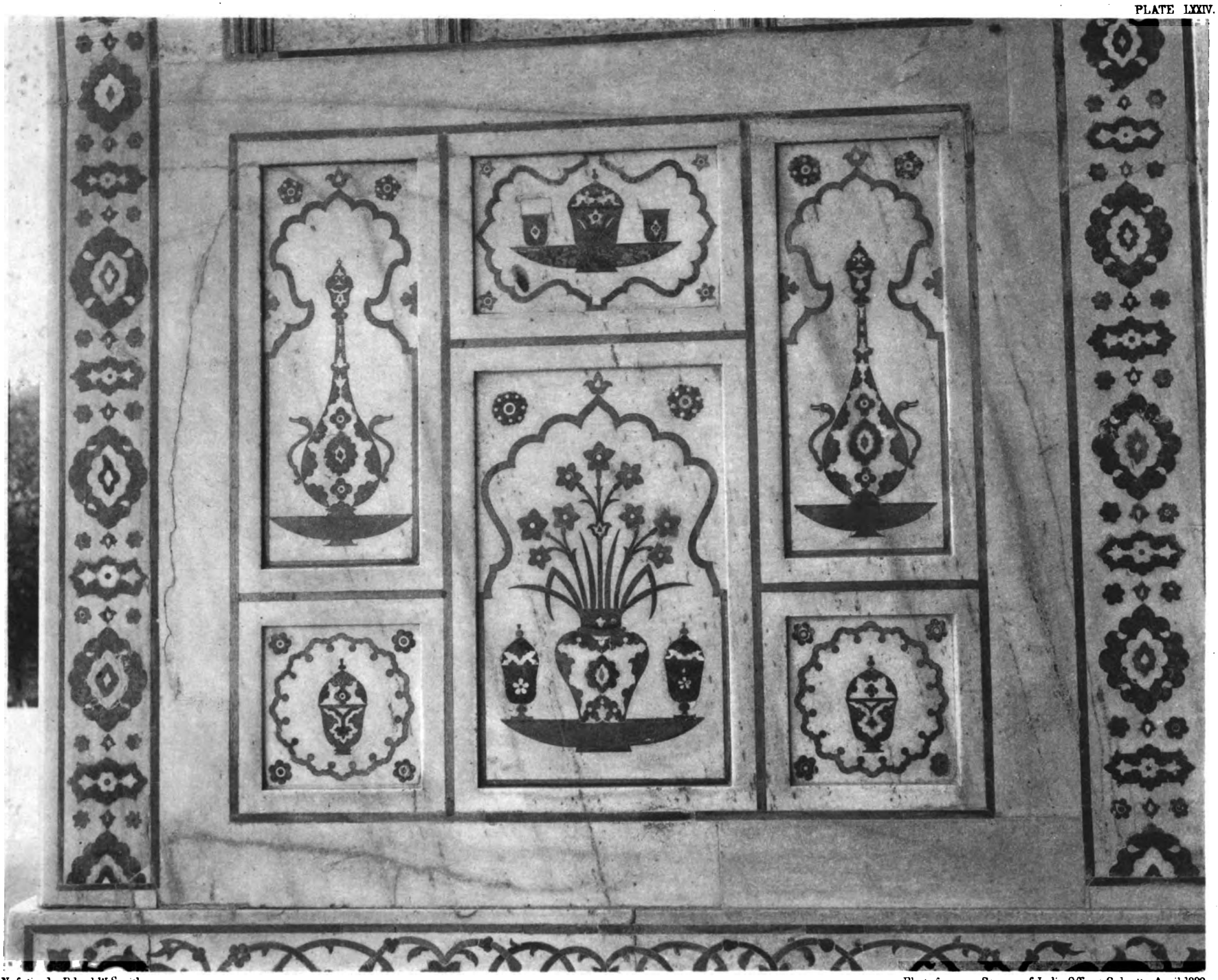
Digitized by Google



Negative by Edmd. W. Smith.

Photogravure Survey of India Offices, Calcutta, April 1898.

AGRA: ITIMÂD-UD DAULAH'S TOMB; INLAID MARBLE PANELS ON THE SIDES OF THE ENTRANCES TO THE TOMB.

Digitized by Google

Digitized by Google

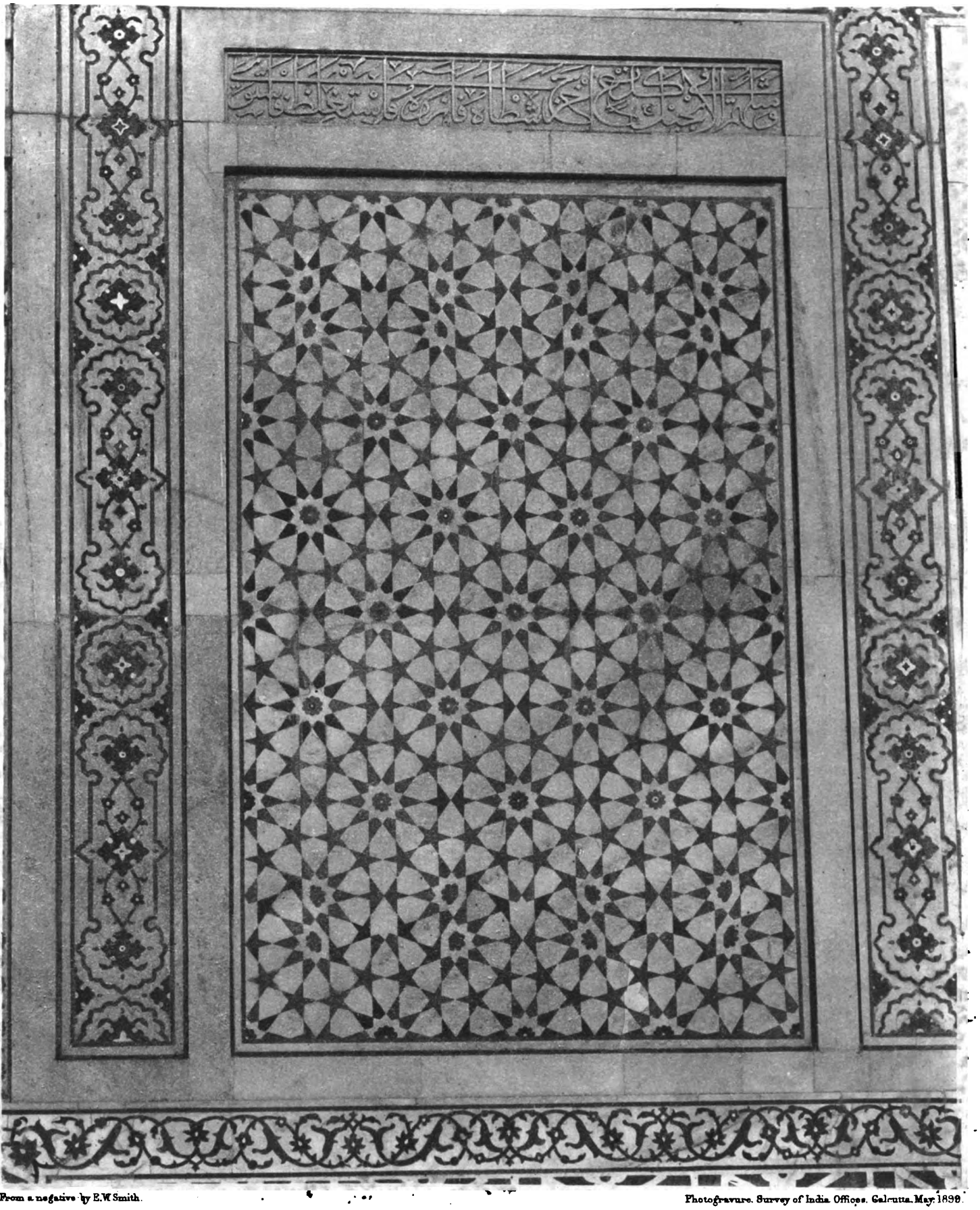
From a negative by E. W. Smith.

Photogravure. Survey of India Offices, Calcutta, May, 1899.

AGRA: ITIMAD-UD-DAULAH'S TOMB.
CARVED SOFFIT OF MARBLE ARCHWAY OVER THE ENTRANCE TO THE TOMB.

Digitized by Google

Digitized by Google

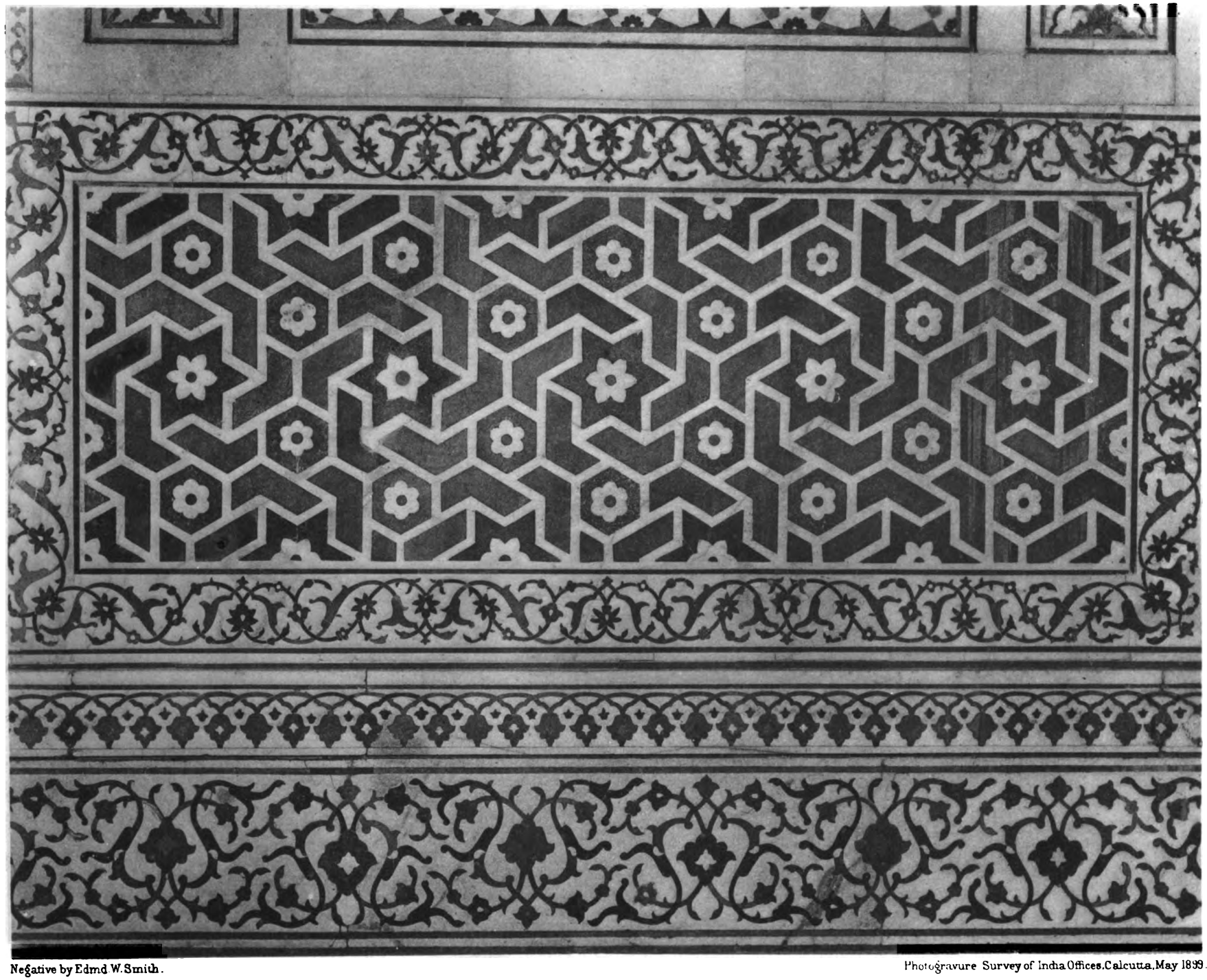


From a negative by E.W. Smith. Photogravure. Survey of India Offices. Calcutta. May 1896.

AGRA: ITIMAD-UD-DAULAH'S TOMB.
INLAID MARBLE PANELS UPON EXTERIOR WALLS.

Digitized by Google

Digitized by Google



Negative by Edmd W. Smith.

Photogravure Survey of India Offices, Calcutta, May 1899.

AGRA. ITIMÂD-UD-DAULAH'S TOMB - INLAID MARBLE PANELS UPON EXTERIOR OF BUILDING.

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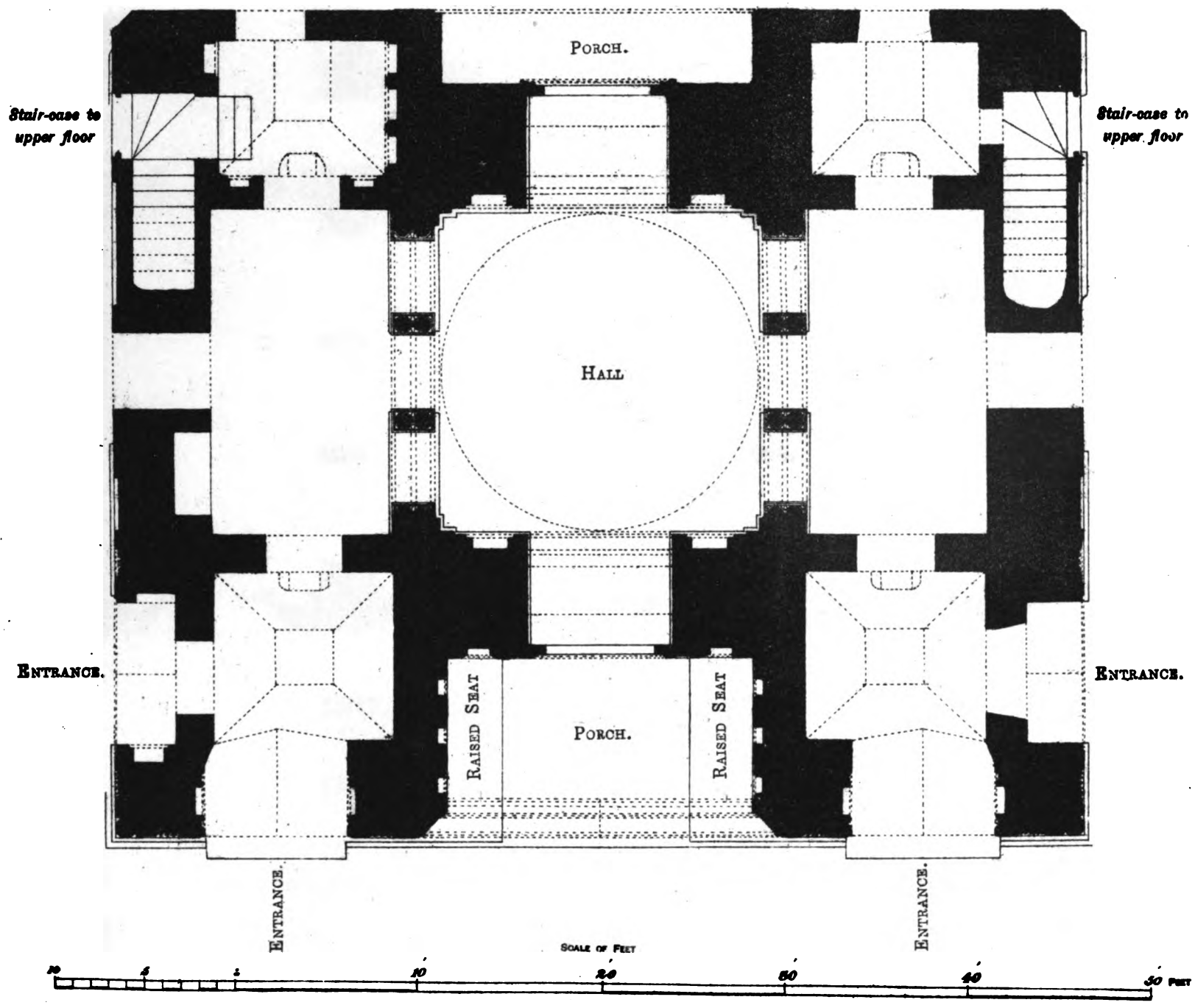
SIKANDRA.—KÂÑCH MAHAL.

PLATE LXXIX.

GROUND FLOOR PLAN.



Archæological Survey of India, N. W. P. Circle, 1894.

PHOTO-LITHOGRAPHED AT THE SURVEY OF INDIA OFFICES, CALCUTTA, JUNE 1899

E. W. SMITH.
Archæological Surveyor

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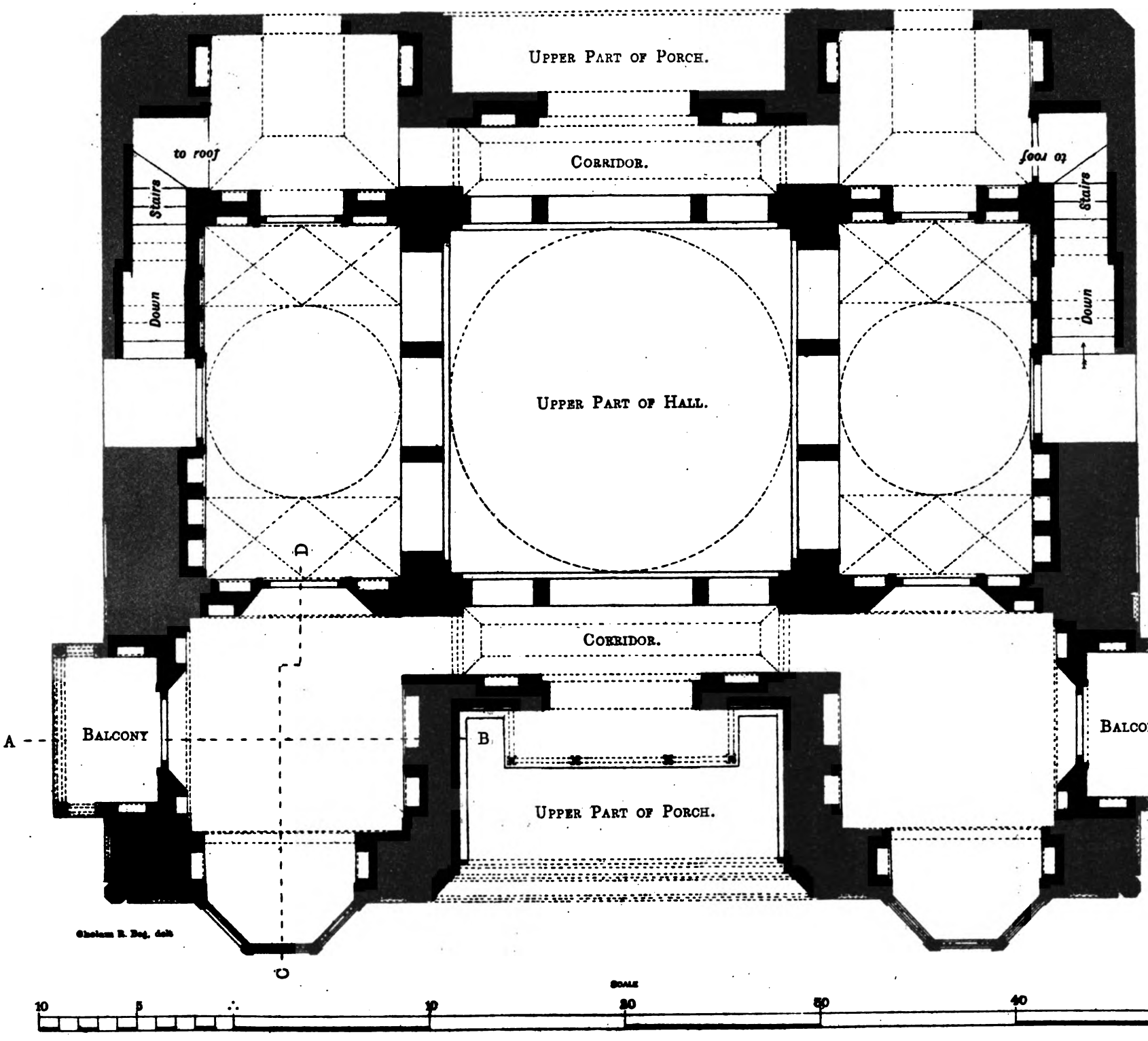
SIKANDRA.—KÂÑCH MAHAL.

Upper Floor Plan.



Archæological Survey of India, N. W. P. Circle, 1896.

E. W. SMITH
Archæological Surveyor.

PHOTOZINCOGRAPHED AT THE SURVEY OF INDIA OFFICES, CALCUTTA, JUNE 1899.

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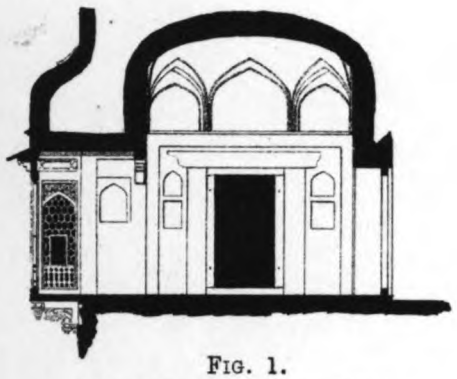


FIG. 1.
SECTION C D, UPPER FLOOR
Plate LXXX.

Gholam Rasul Beg, delt.

SECTION THRO' BUILDING FROM NORTH TO SOUTH.

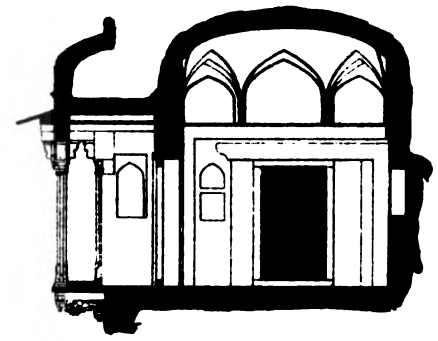
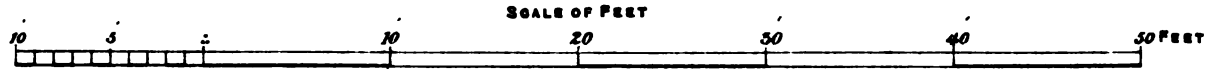


FIG. 2. SECTION A B, UPPER FLOOR.



Archæological Survey of India. N. W. P. Circle, 1894.

E. W. SMITH.
Archæological Surveyor.

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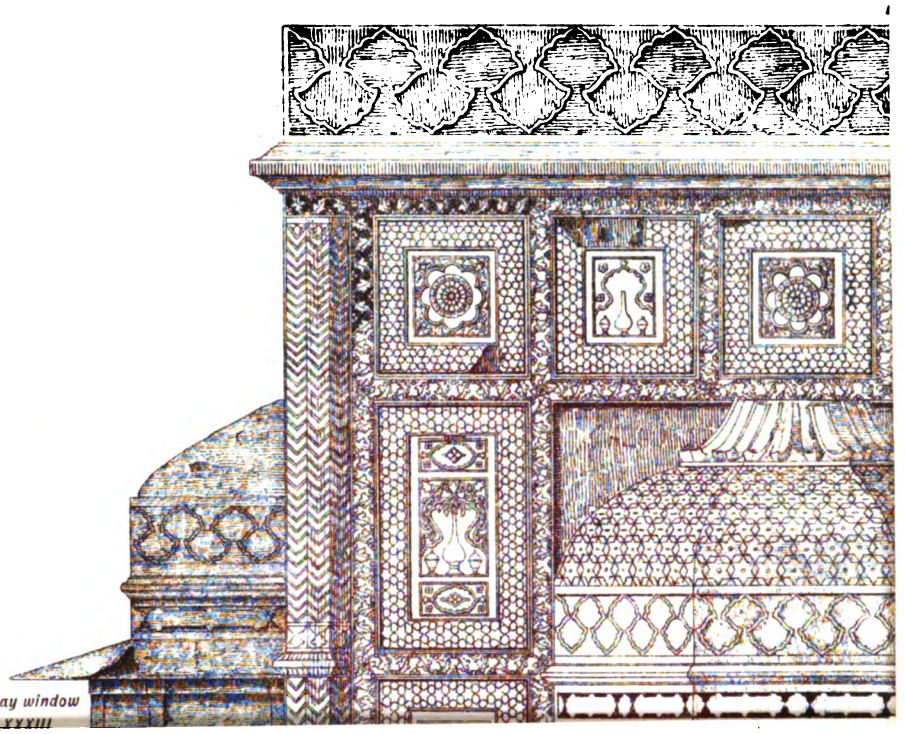

For details of bay window
see Plates LXXVIII

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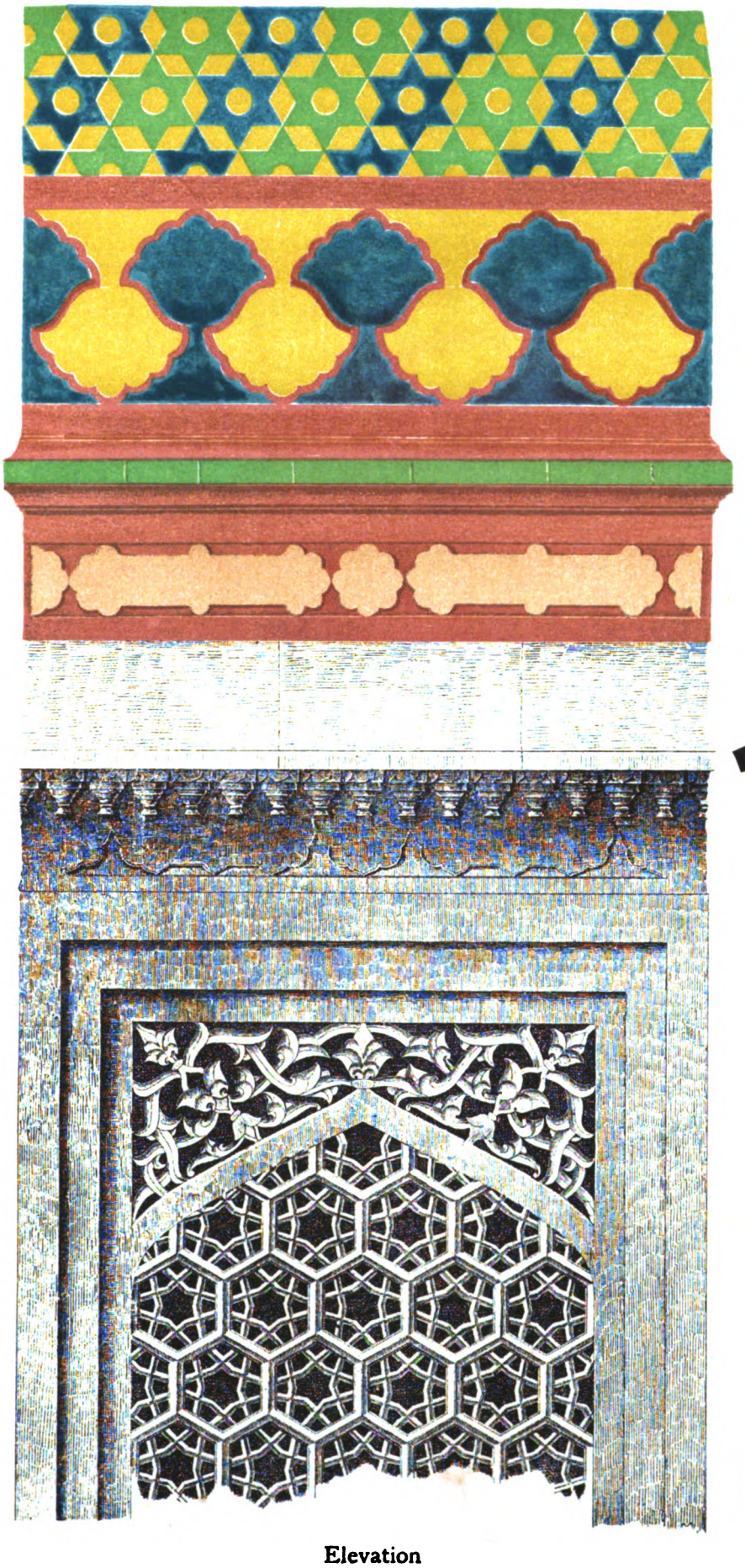
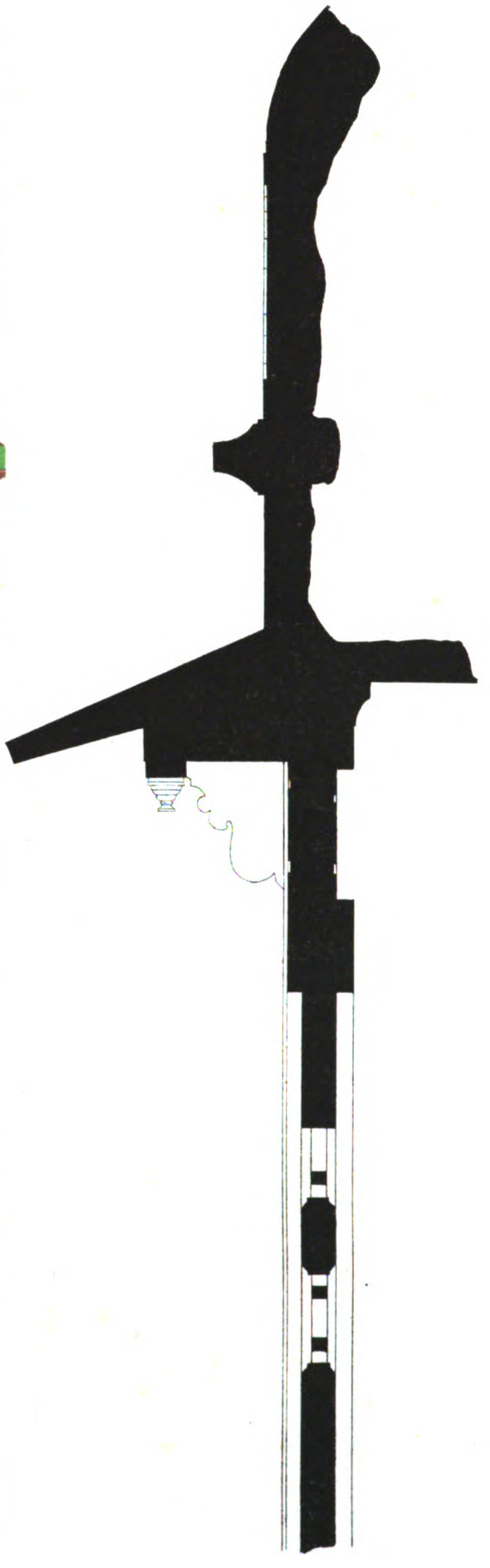
SIKANDRA: The Kânch Mahal. Detail of the upper part of the Bay Windows.



Elevation



Section

SCALE

Edmd. W Smith

FAZL-UD-DIN I. & SOHUN LAL, DEL.

Archæological Surveyor N.W.P.

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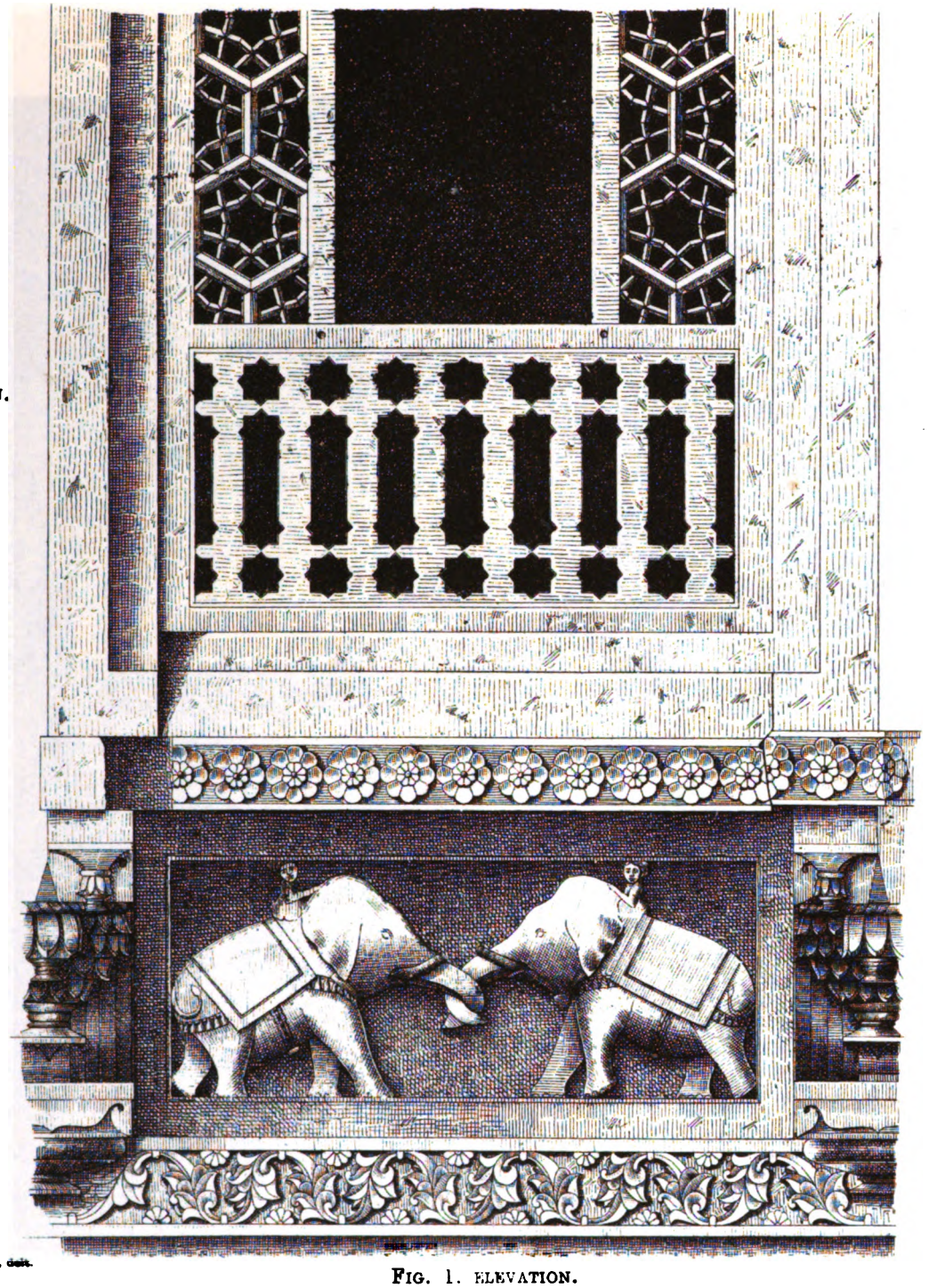
SIKANDRA.

DETAIL OF BAY WINDOWS, FIRST FLOOR—LOWER PORTION.

SECTION.



Fasal ud-din I, del.

FIG. 1. ELEVATION.

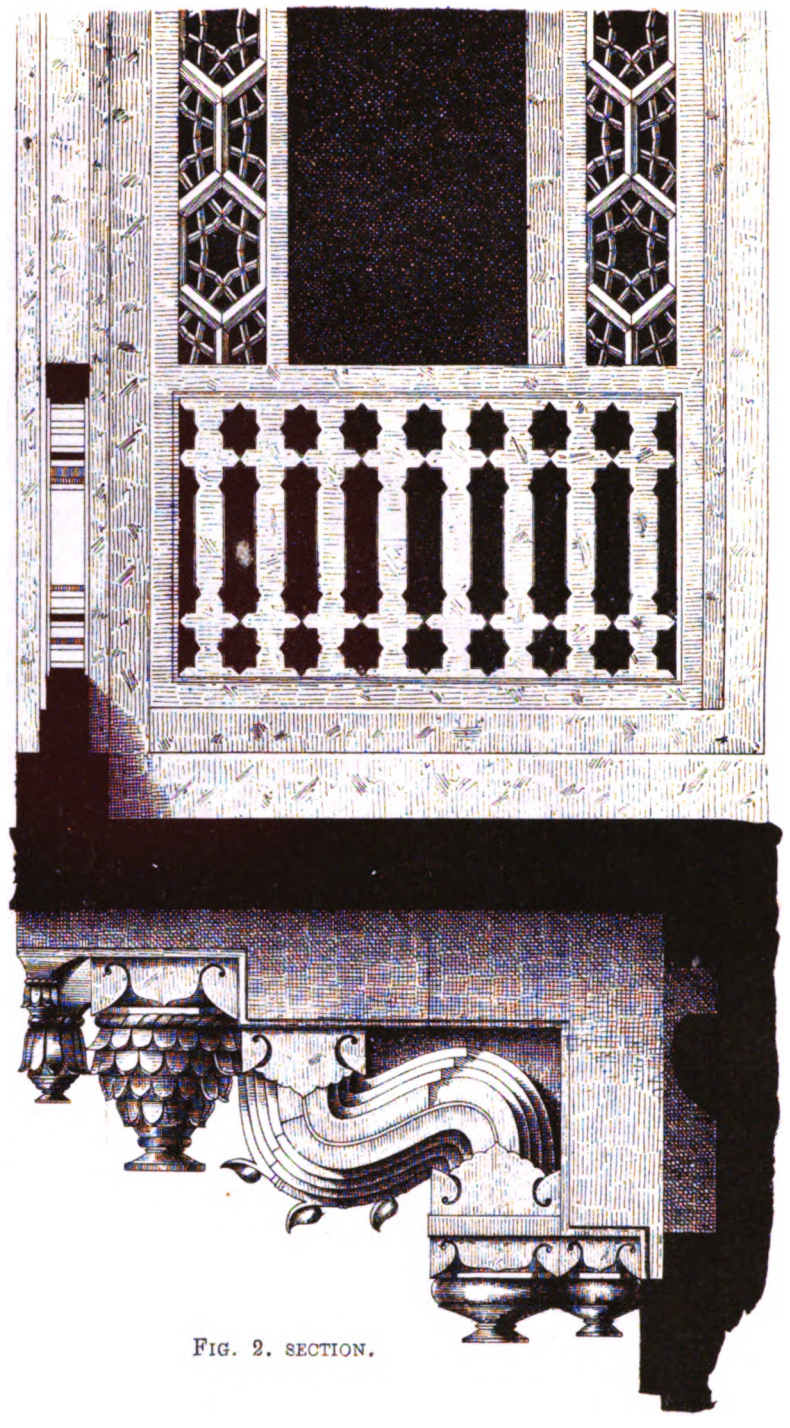


FIG. 2. SECTION.

SCALE OF 0 1 2 3 4 FEET

SCALE

Archæological Survey of India, N. W. P. Circle, 1904.

Photo lithographed at the Survey of India Offices, Calcutta. September 1906.

E. W. SMITH,
Architectural Surveyor

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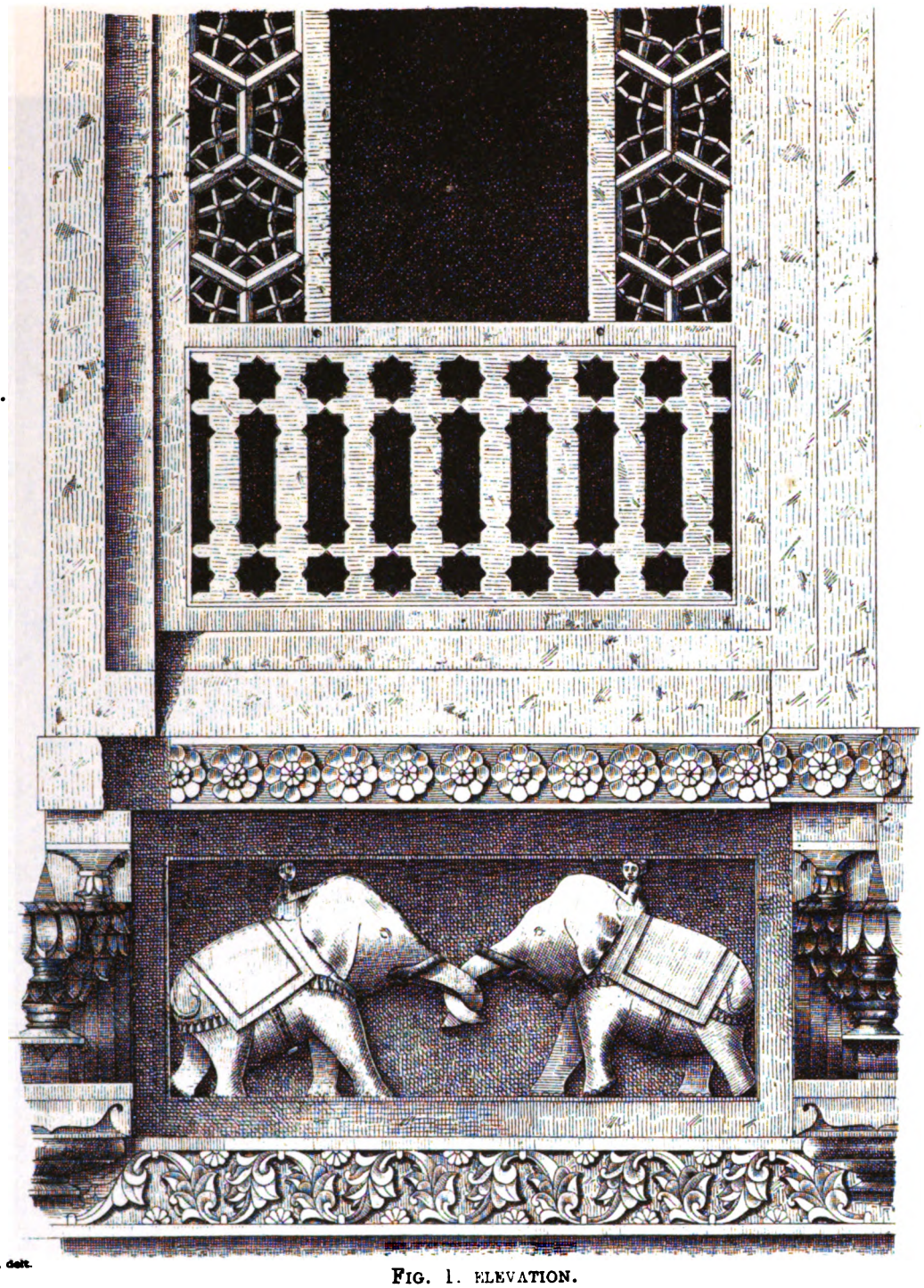
SECTION.



Fasal-ud-din I, delt.

FIG. 1. ELEVATION.

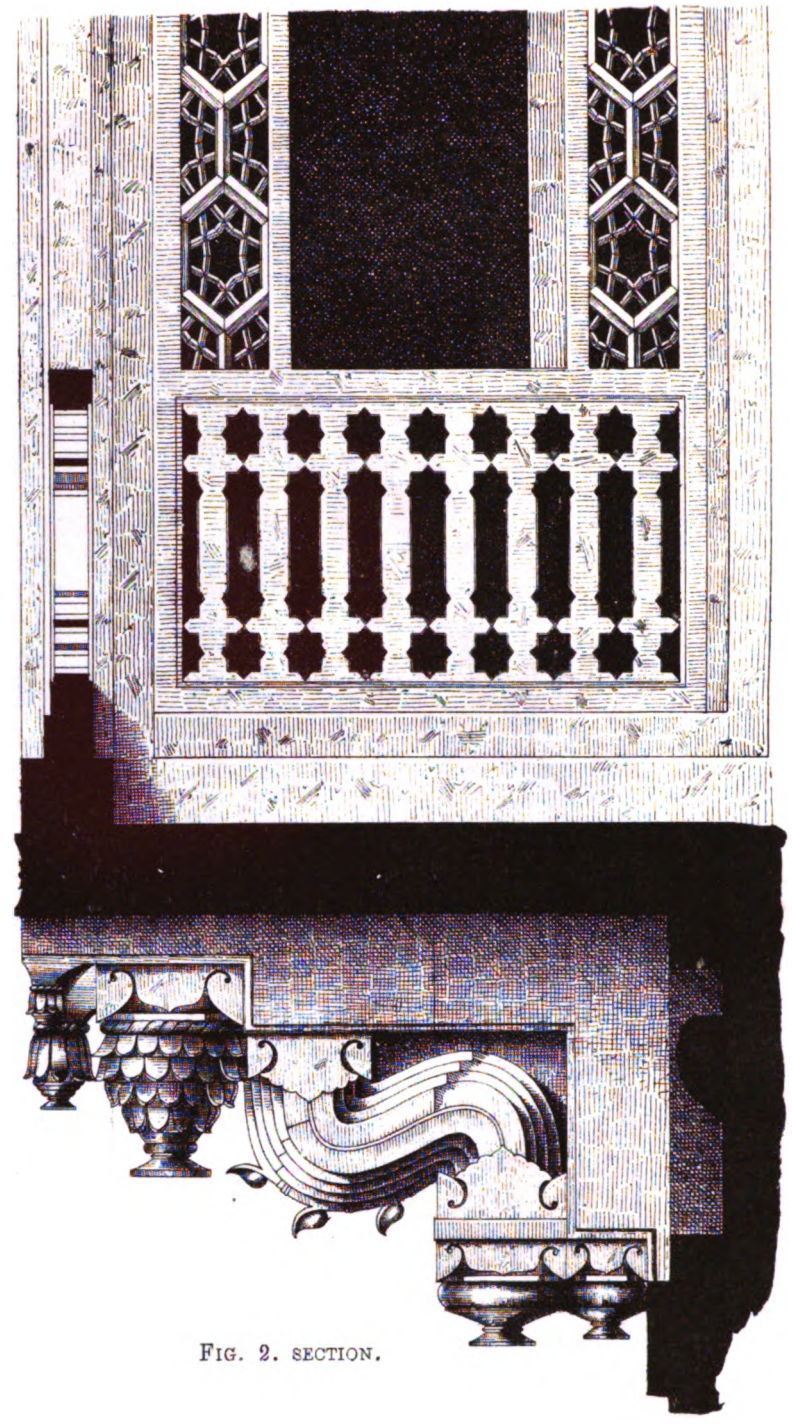


FIG. 2. SECTION.

SCALE OF 1" 0 1 2 3 FEET

SCALE

Archæological Survey of India, N. W. P. Circle, 1894.

Photo lithographed at the Survey of India Offices, Calcutta. September 1896.

E. W. SMITH,
Architectural Surveyor.

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Photogravure. Survey of India Offices, Calcutta, May, 1899

SIKANDRA, AGRA.- THE KÂNCH MAHAL.- NORTH WEST ANGLE OF THE BUILDING.

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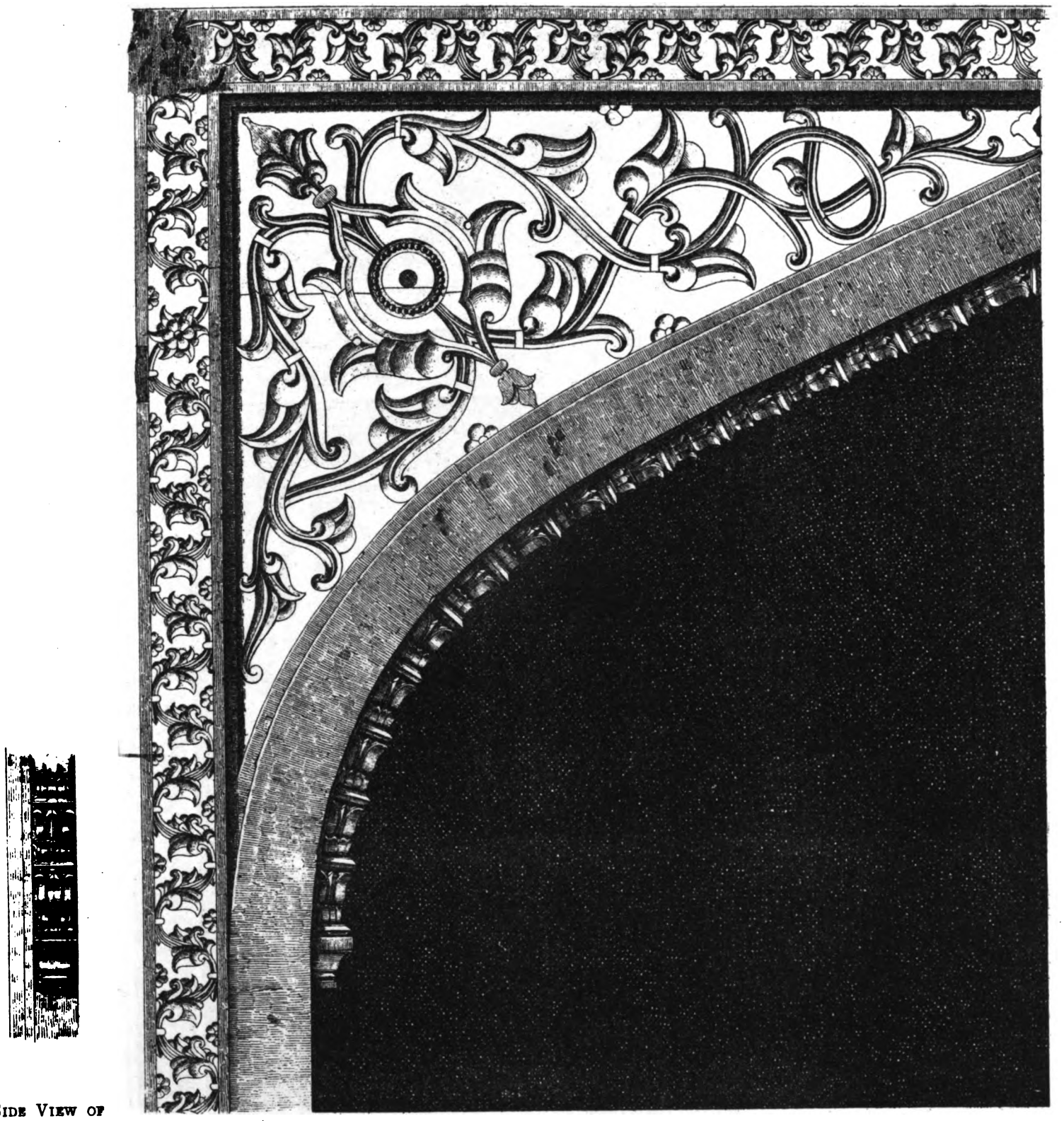
DETAIL OF CARVED SPANDRIL ABOVE THE NORTH-WEST ENTRANCE.



SIDE VIEW OF SPRINGING OF ARCH.

Ram Singh, delt.

SCALE

INCHES 12 9 6 3 0 1 2 3 FEET

PHOTOZINCOGRAPHED AT THE SURVEY OF INDIA OFFICE, CALCUTTA, JUNE 1899

Archæological Survey of India, N. W. P. Circle, 1894.

E. W. SMITH,
Archæological Surveyor.

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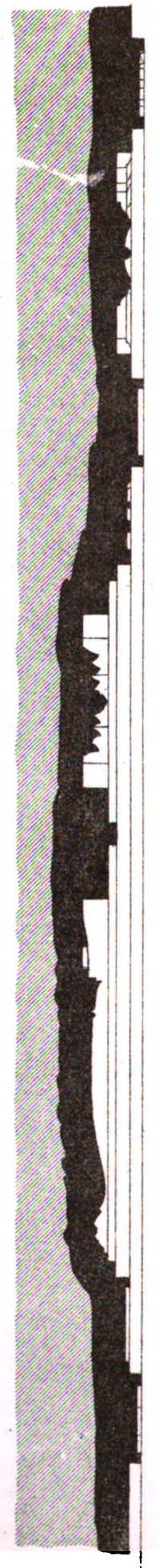
SIKANDRA.—KÂÑCH MAHAL.

Detail of Stone Panels in Exterior Walls.

Elevation.



Section.

Scale of Feet

Inches 12 6 3 1 2 3 4 Feet

Archæological Survey of India, N. W. P. Circle, 1904

E. W. SMITH,
Archæological Surveyor

Photozincographed at the Survey of India Offices Calcutta, June 1899

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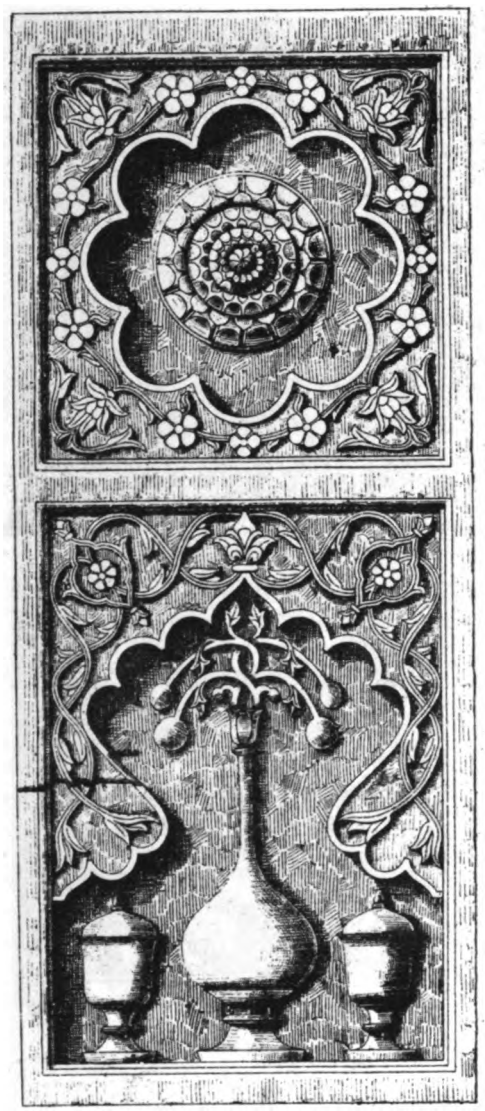
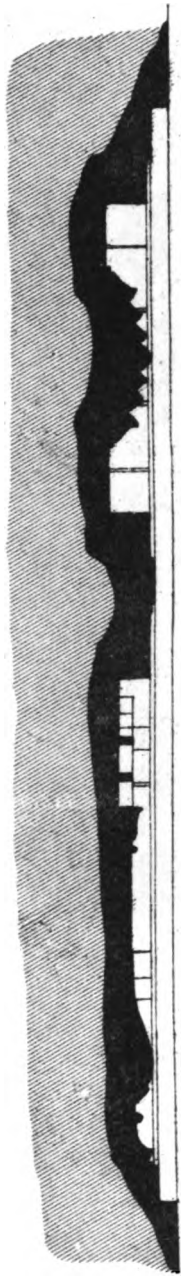
SIKANDRA.—KANOH MARIAM.

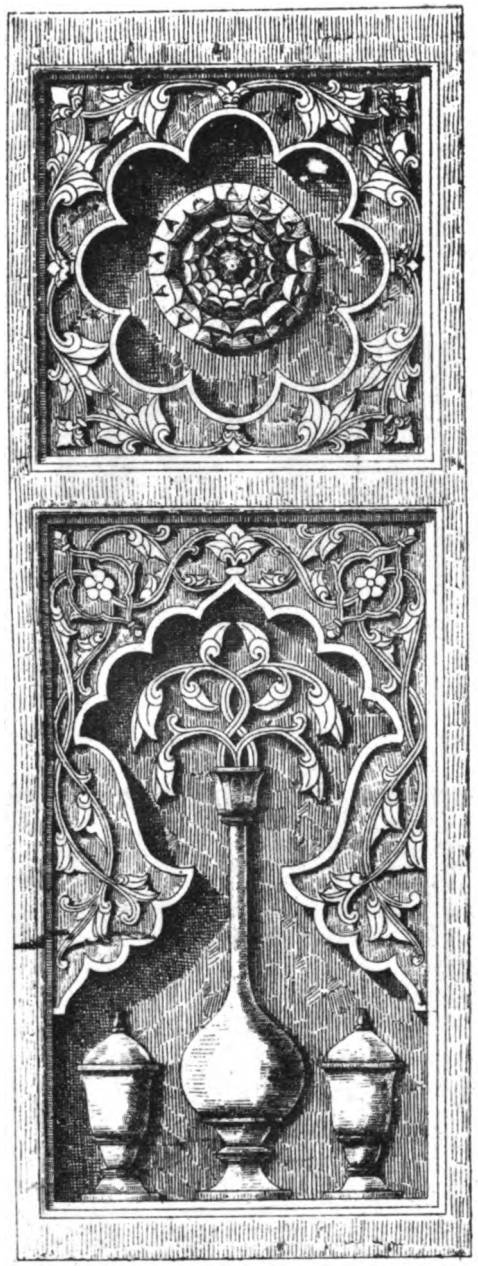
CARVED STONE PANELS UPON EXTERIOR WALLS.



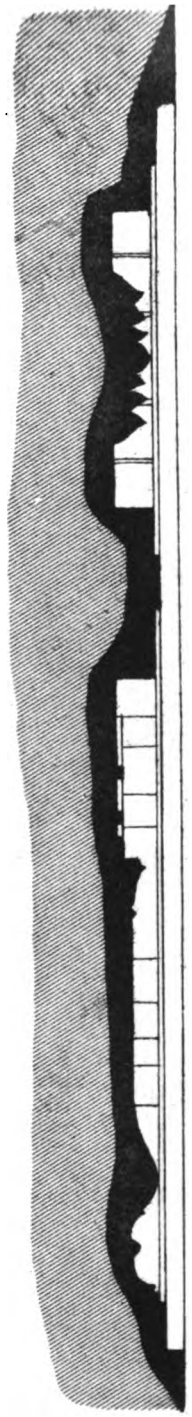
ELEVATION.



SECTION.



ELEVATION.



SECTION.

SCALE OF FEET

INCHES 12 6 0 1 2 3 FEET

PHOTOZINCOGRAPHED AT THE SURVEY OF INDIA OFFICES, CALCUTTA, JUNE 1882.

E. W. SMITH,
Archæological Surveyor.

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SIKANDRA.—KÂÑCH MAHAL.

NORTH FAÇADE. DETAIL OF CARVED STONE PANELS BELOW CORNICE.

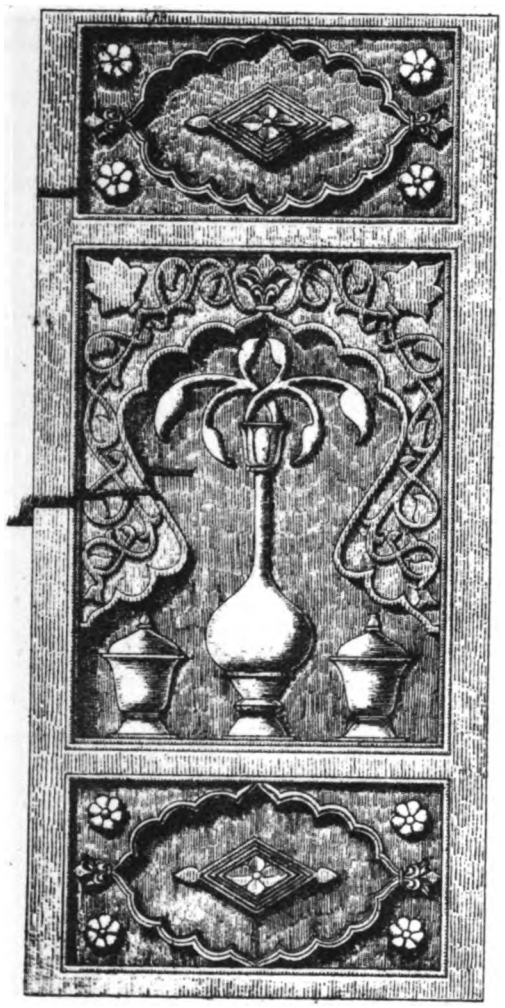
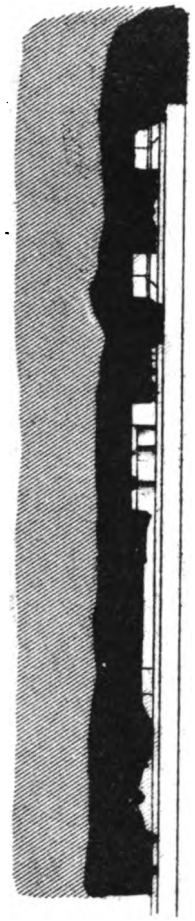
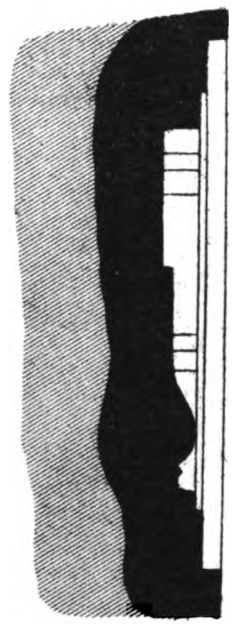


FIG. 1.



SECTION

FIG. 2.



SECTION

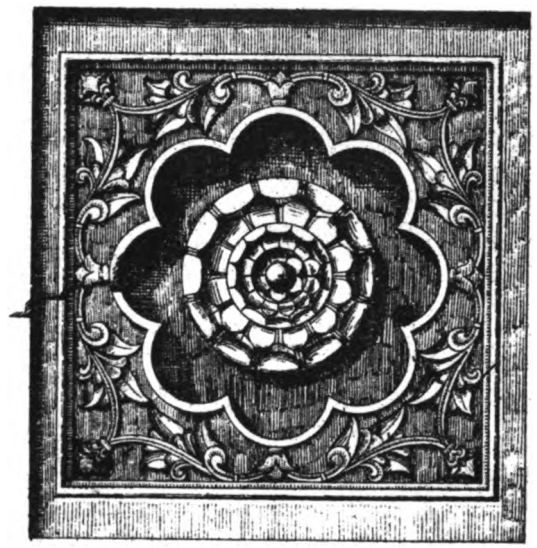
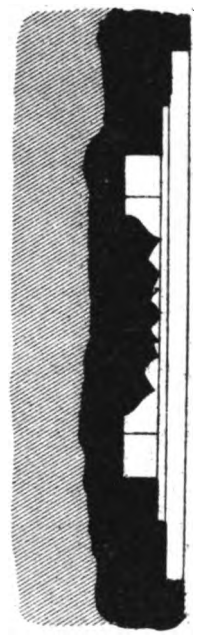
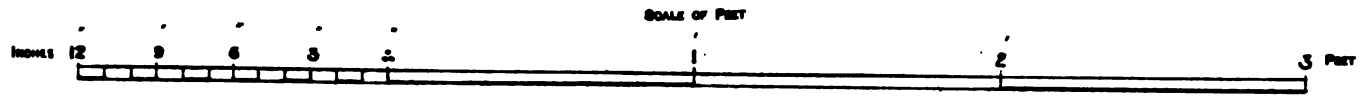


FIG. 3



SECTION



Archæological Survey of India, N. W. P. Circle, 1904.

PHOTOZINCOGRAPHED AT THE SURVEY OF INDIA OFFICE, CALCUTTA, JUNE 1904.

E. W. SMITH,
Archæological Surveyor.

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SIKANDRA: The Kâñch Mahal. Detail of the Main Cornice and Panelling upon the Porch Walls.

Fig. 1. Detail of coloured tiles on main cornice.

Section

Inches 12 9 6 3 0 1 2 3 Feet

SCALE OF FEET

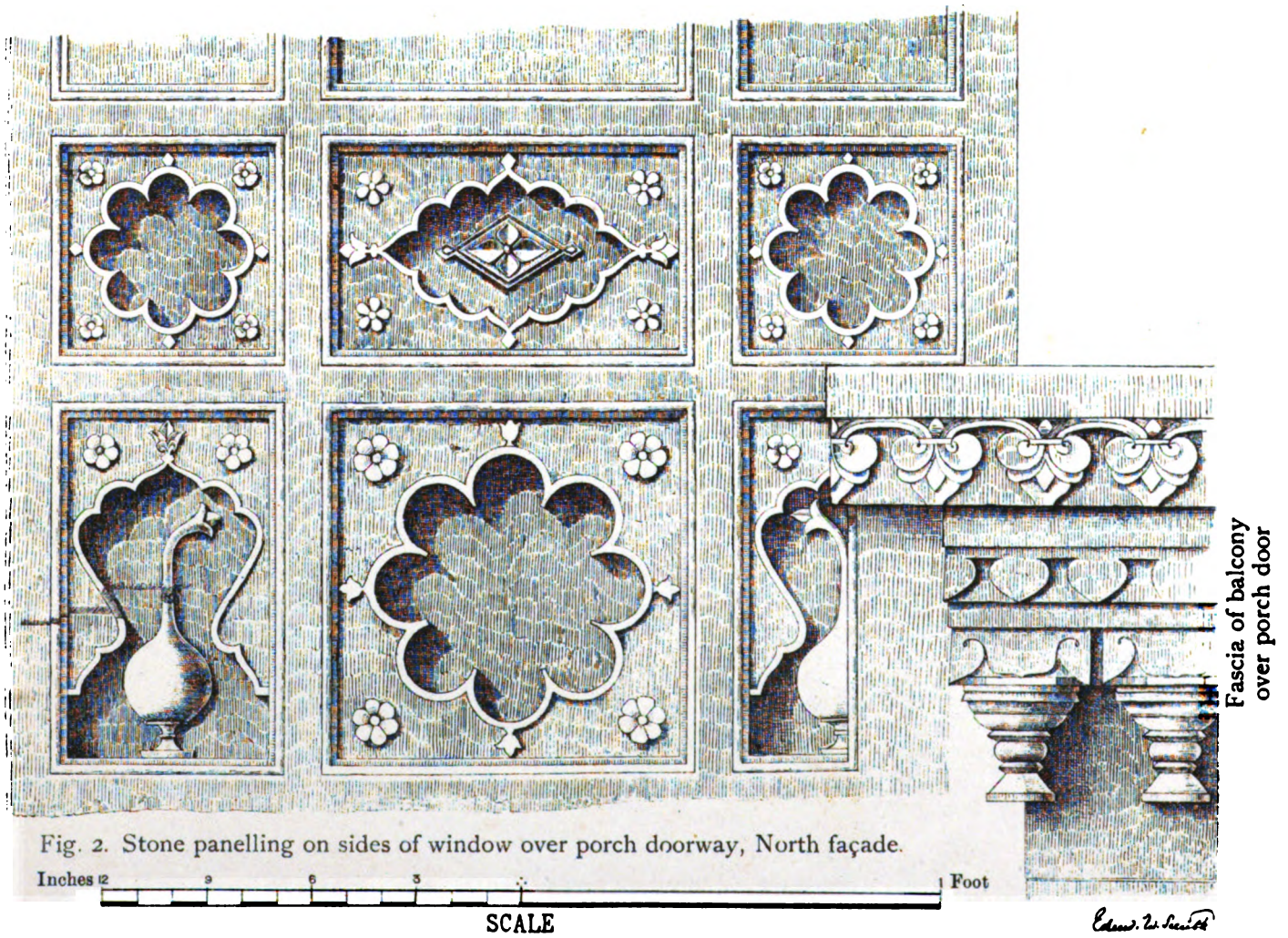

Fig. 2. Stone panelling on sides of window over porch doorway, North façade.

Fascia of balcony over porch door

Inches 12 9 6 3 0 1 Foot

SCALE

RAM SINGH & BHAIRAV BAKHSH, DEL

Archæological Surveyor N.W.P.

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DETAIL OF PLINTH.

PLAN OF SHAFT A.

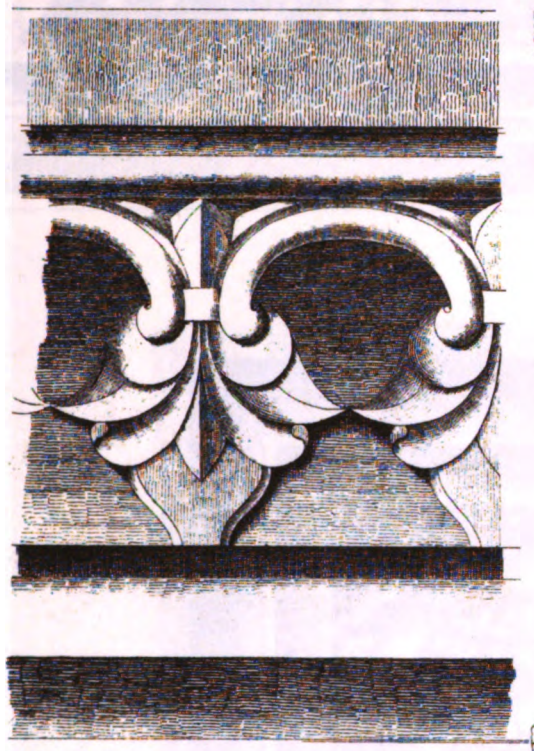


FIG. 2. DETAIL OF CAPPING.

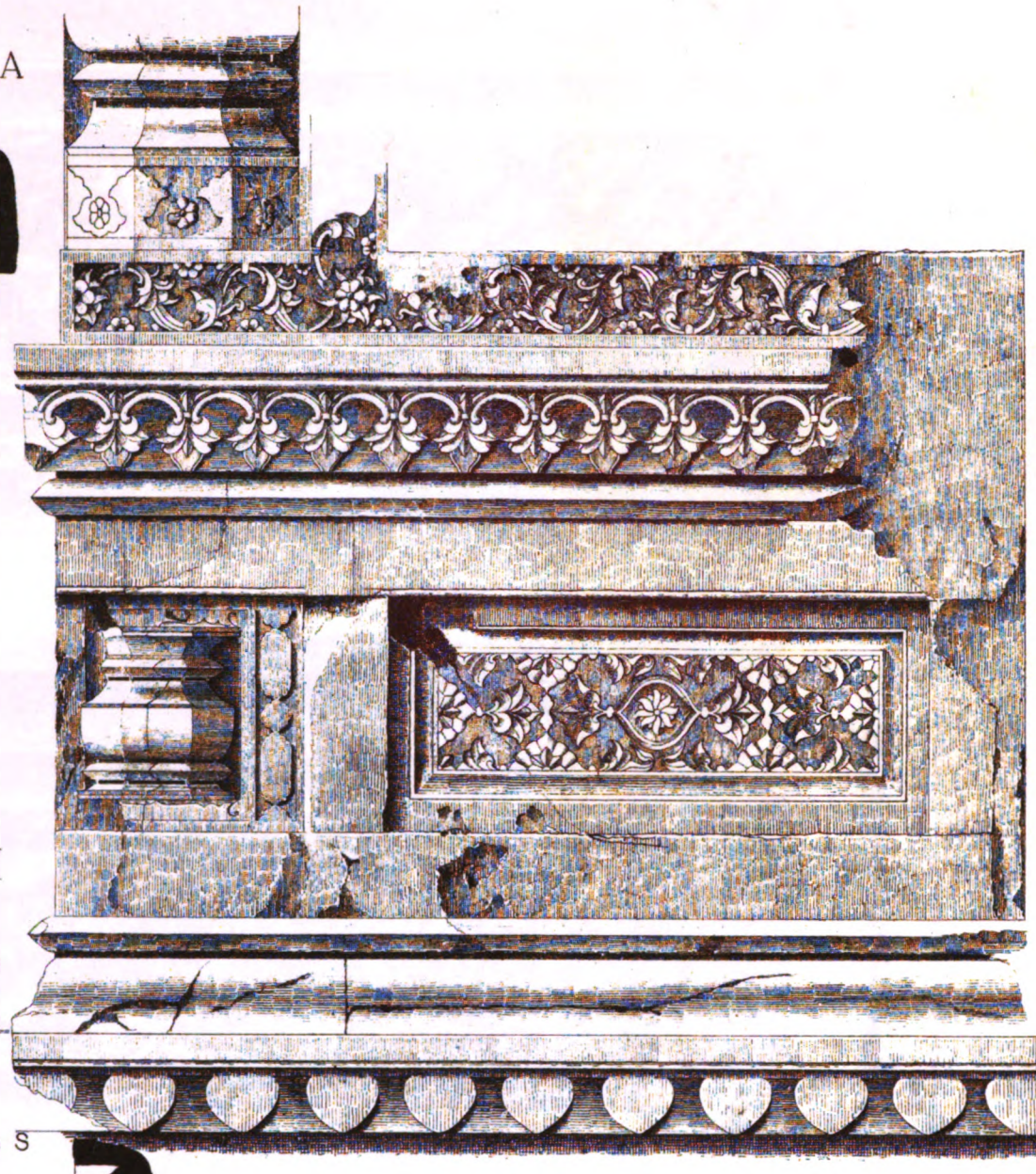
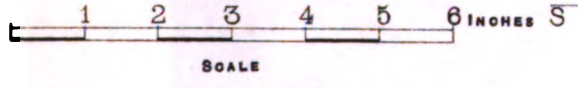


FIG. 1. ELEVATION.

SECTION.



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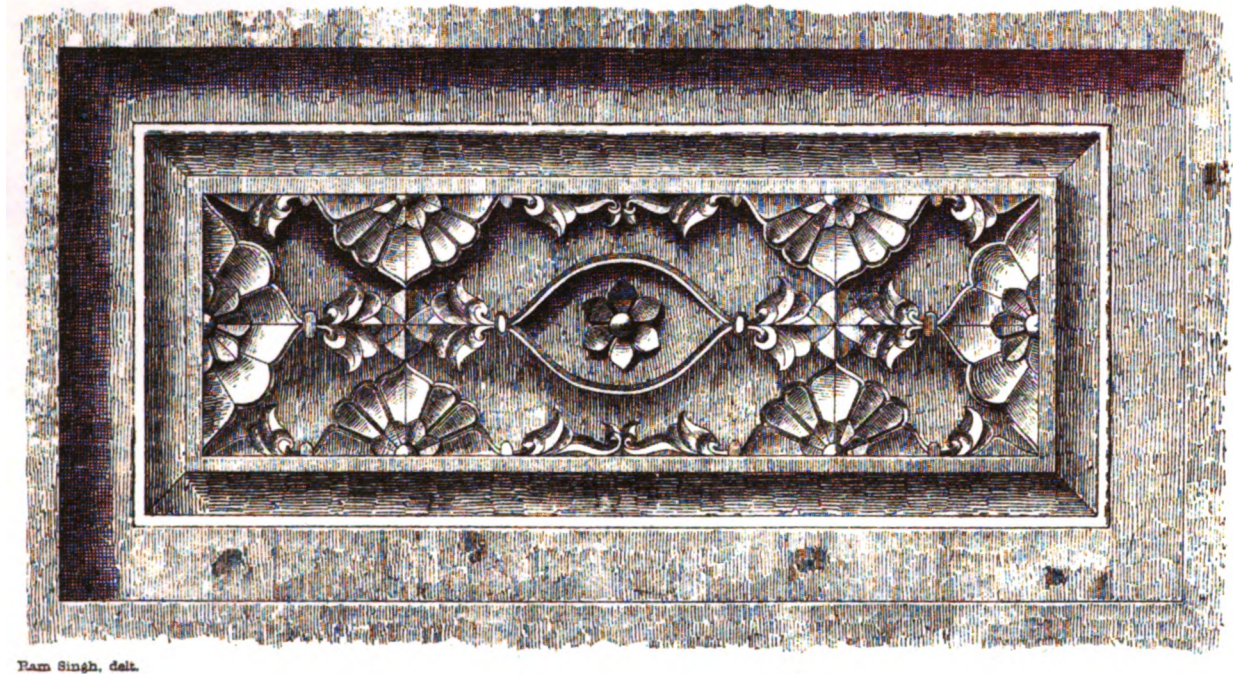
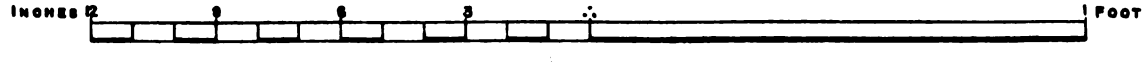
SECTION.



Ram Singh, delt.

SECTION.

DETAIL OF CARVED STONE PANELS IN PLINTH OF PORCH.



SCALE

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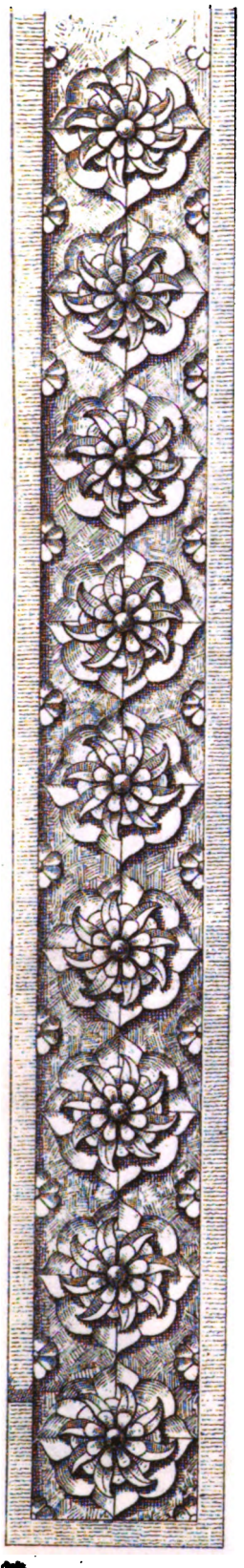
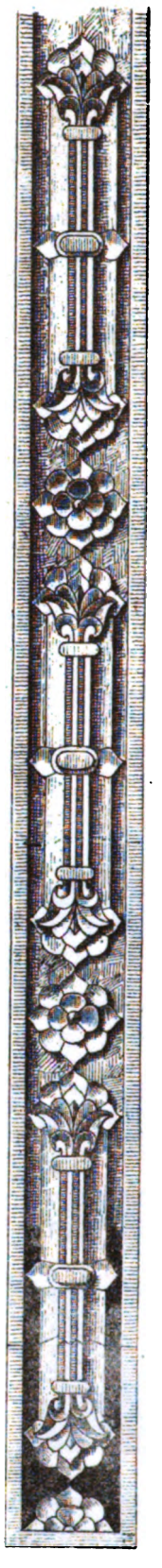
SIKANDRA.—KÂÑCH MAHAL.

Detail of Carving upon Splayed Jambs of Archway over Main Entrance.

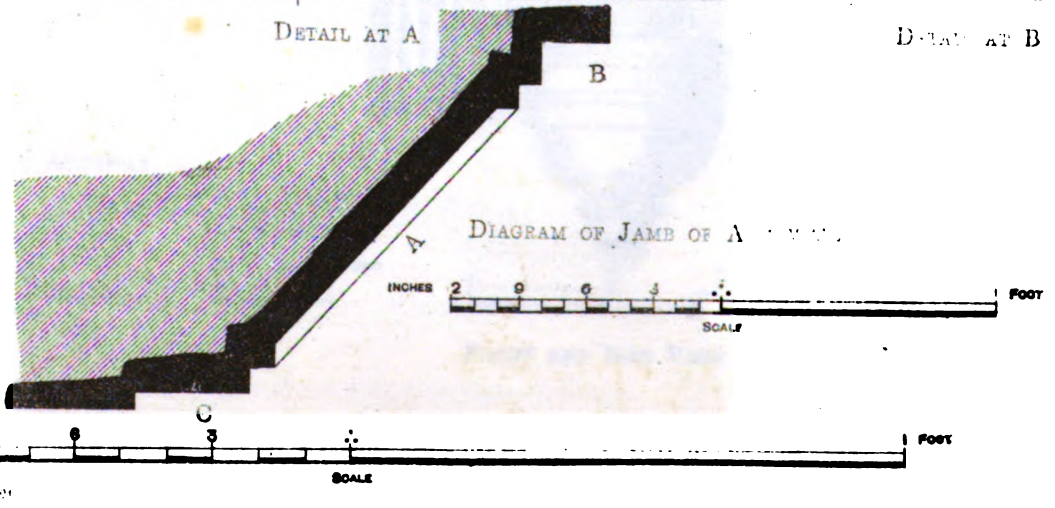


Detail at C

Detail at A



Detail at B



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Archæological Survey of India N. W. P. Circle 1901

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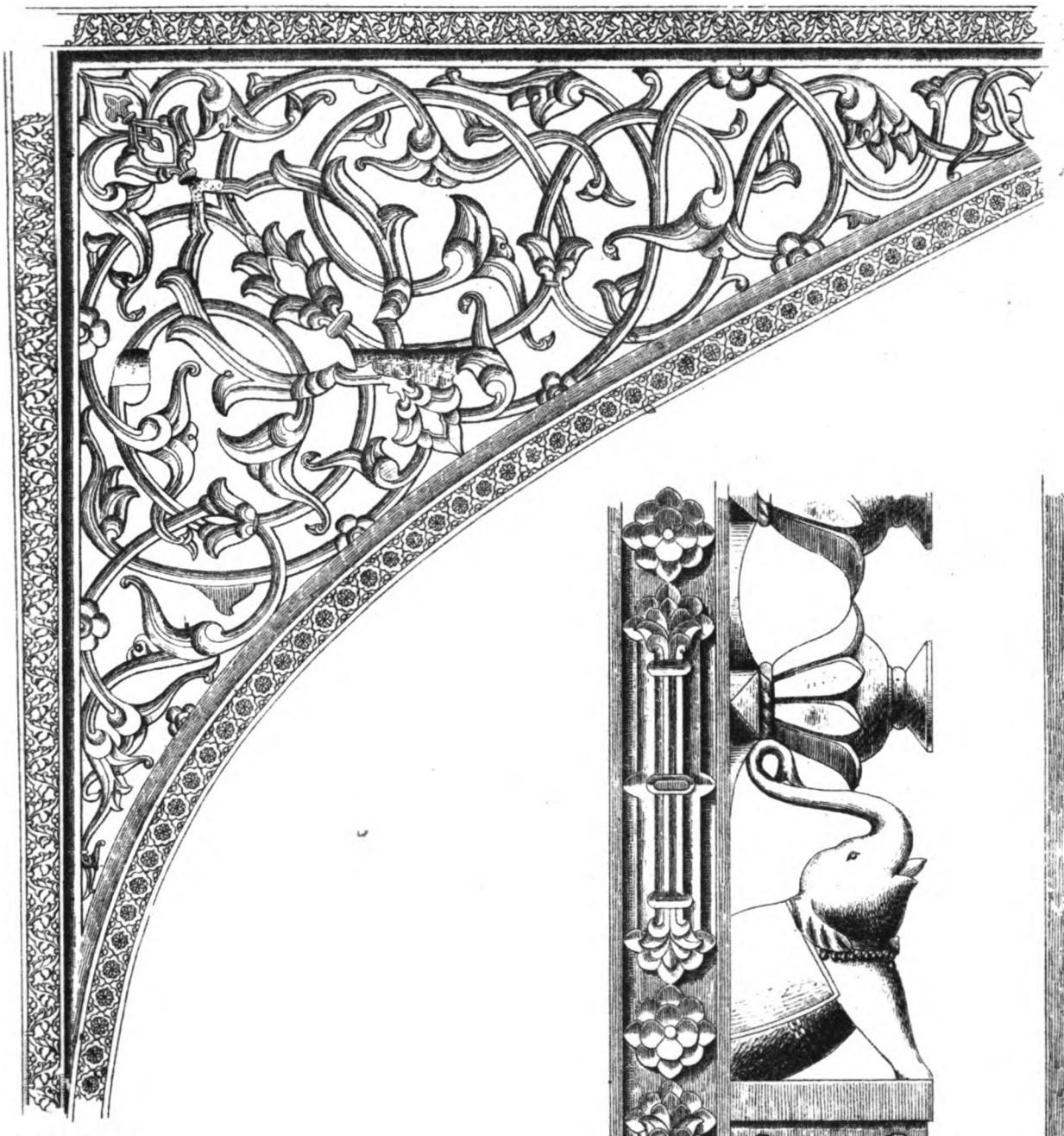
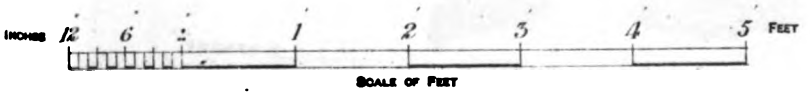
SIKANDRA.—KÂÑCH MAHAL.

DETAIL OF CARVED SPANDRIL OVER THE ARCHWAY ABOVE MAIN ENTRANCE

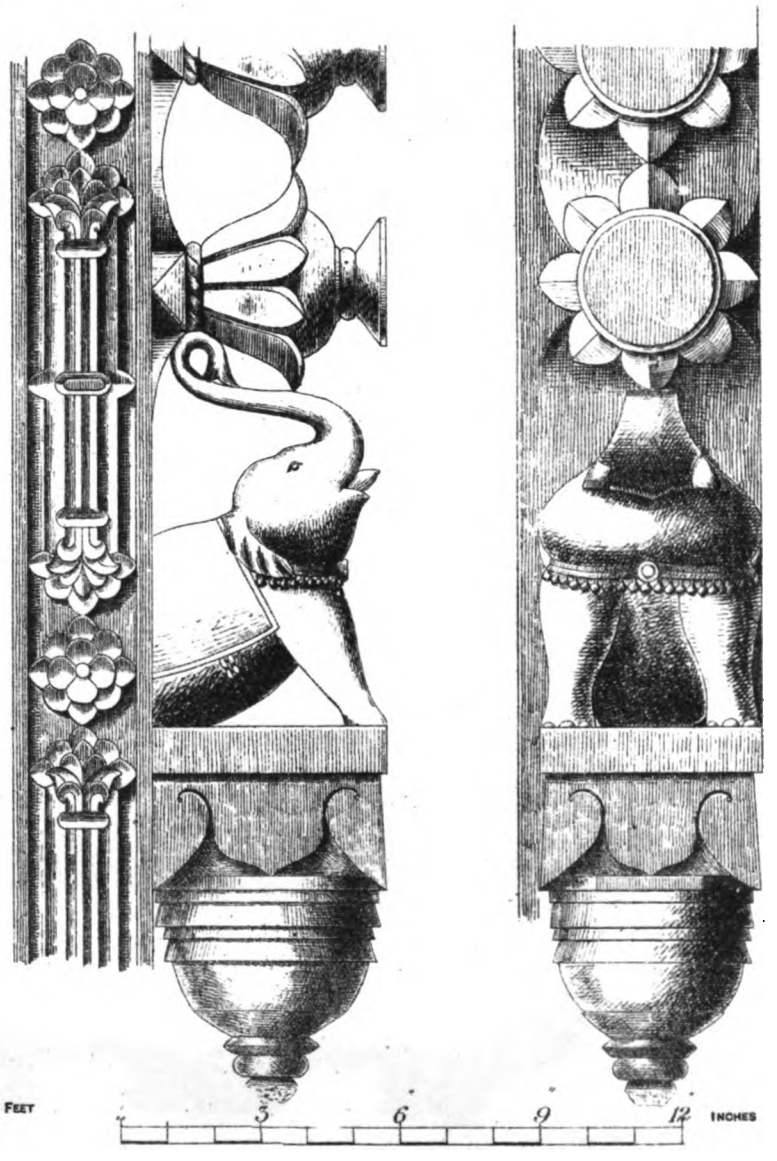


Fazul-ud-din I., delt.

CARVED SPANDRIL ABOVE ARCHWAY.



SCALE OF FEET



FRONT AND SIDE VIEW OF SPRINGING OF ARCHWAY.

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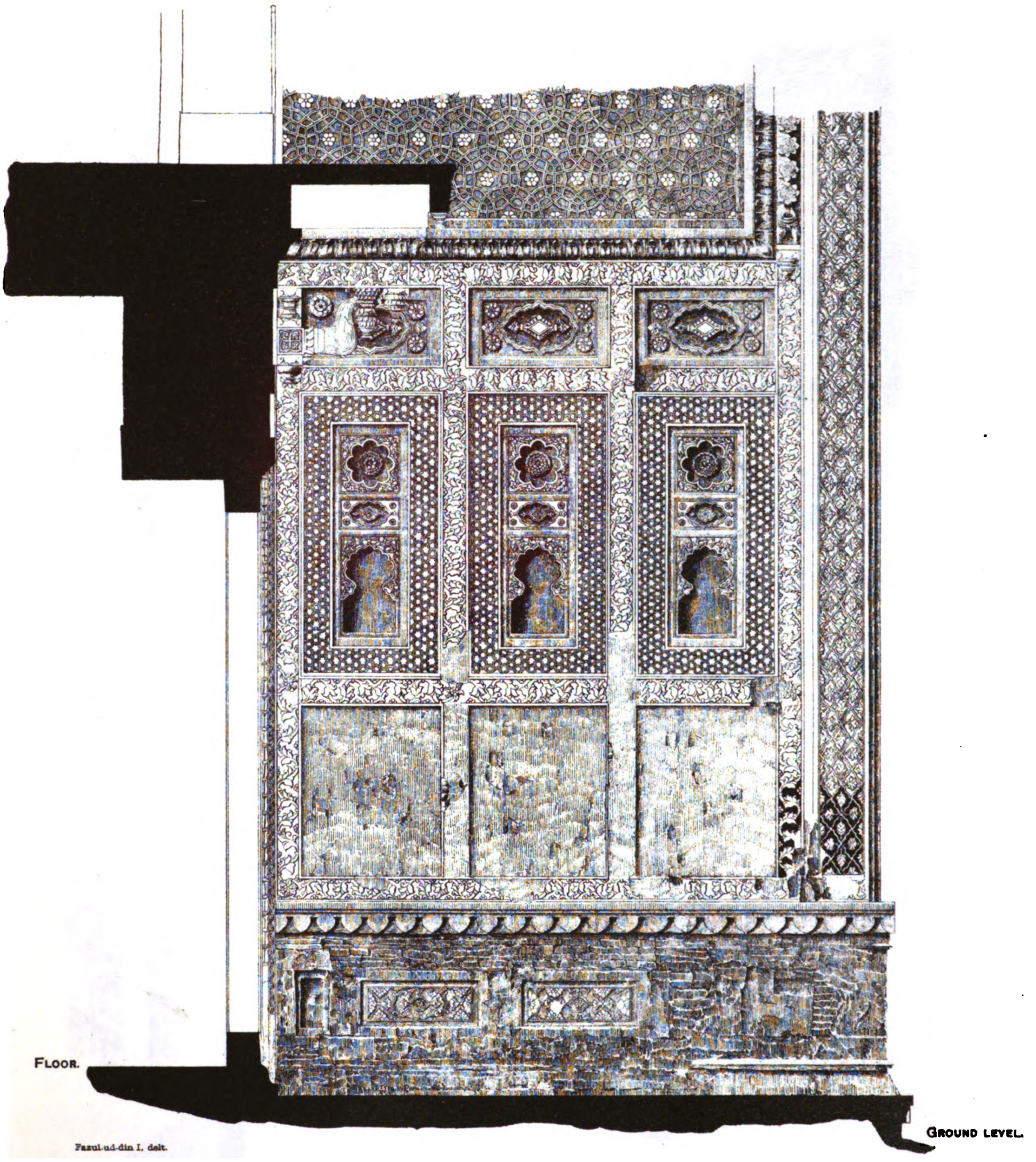
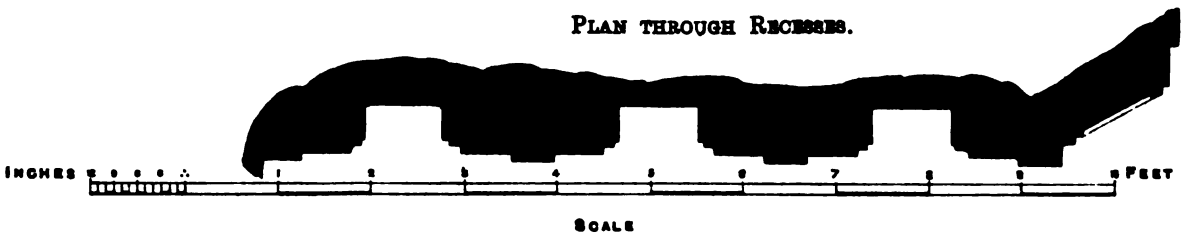
SIKANDRA.—KÂNCH MAHAL.

Detail of West side of Porch.



Fazul-ud-din I, delt.

Plan through Recesses.



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SIKANDRA.—KÂÑCH MAHAL.

Detail of Stone Planelling on side of Entrance.

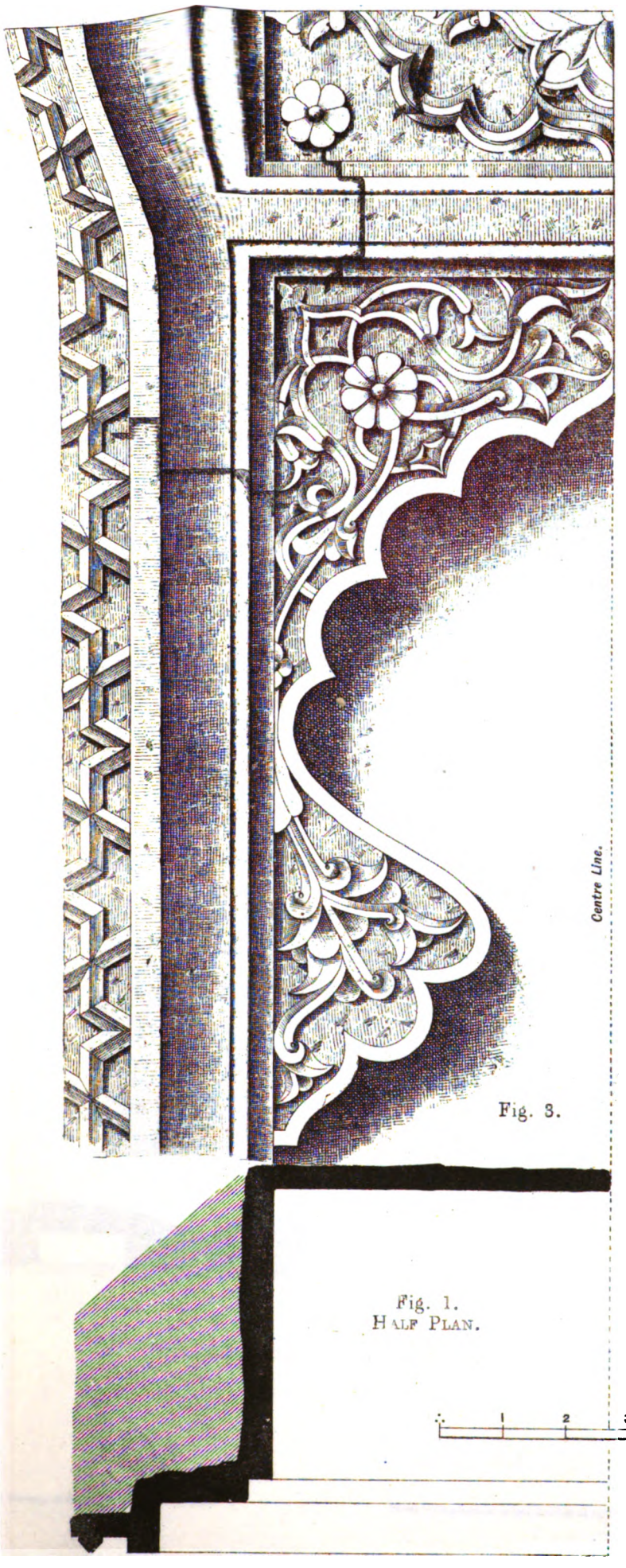


Fig. 3.

Fig. 1.
Half Plan.

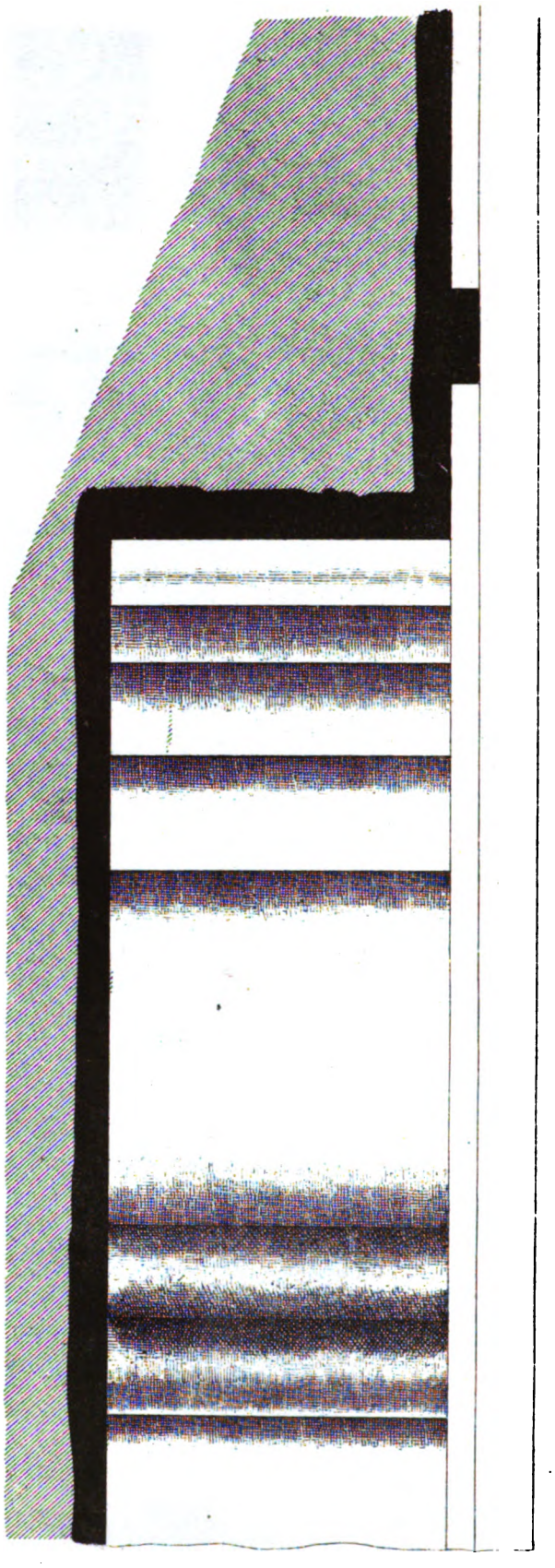
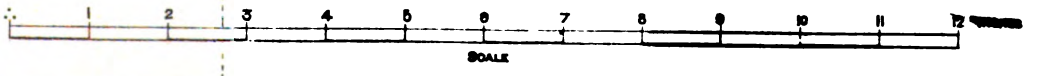


Fig. 2.
Half Section.



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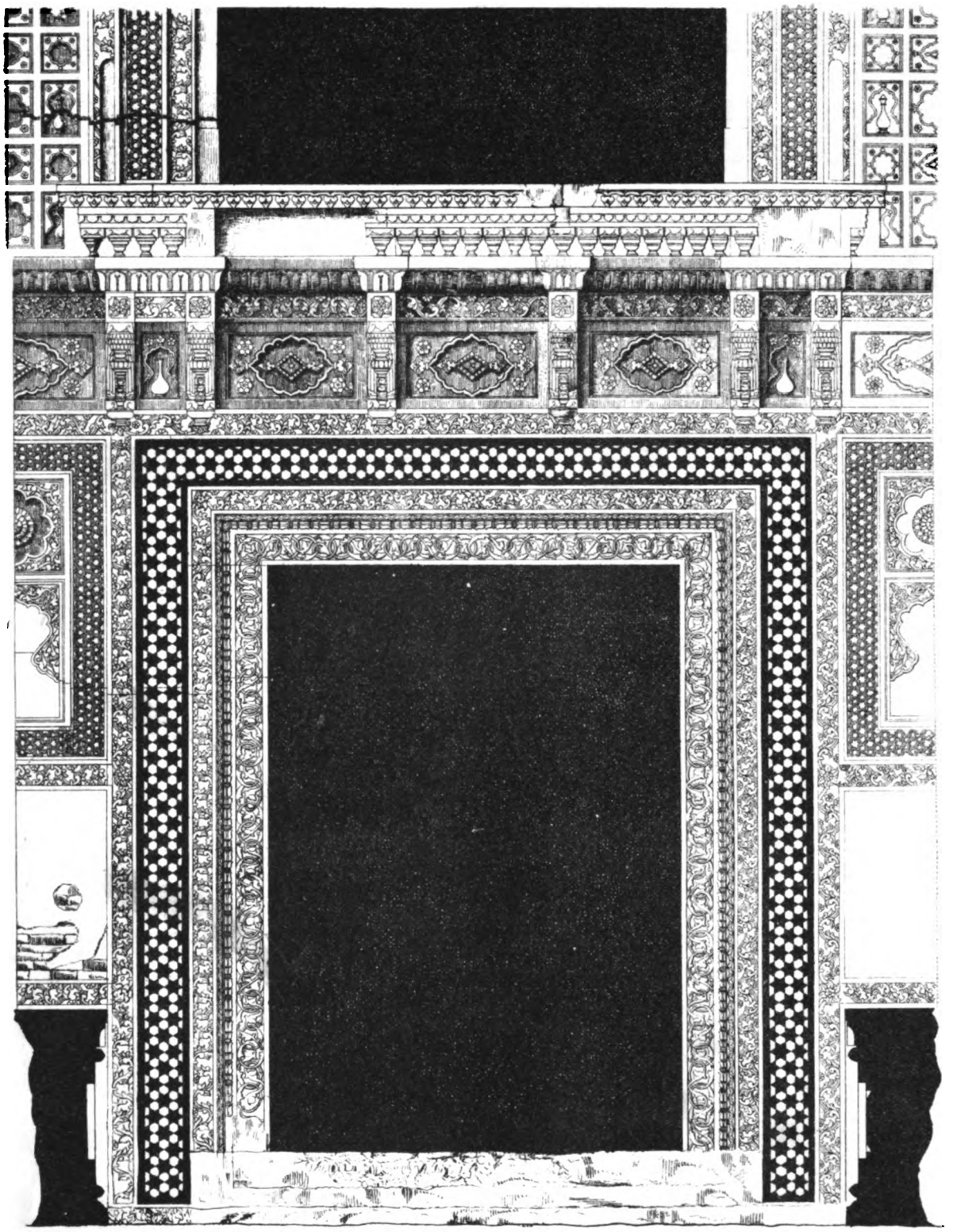
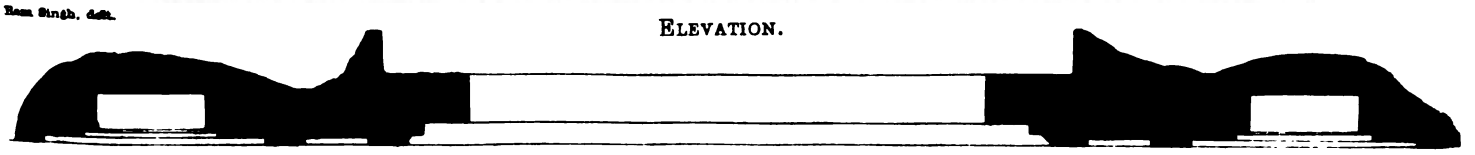
DETAIL OF CARVED STONE DOORWAY BENEATH THE PORCH, NORTH FAÇADE.



For detail see Plate XCIX.

Ram Singh, delt.

ELEVATION.



PLAN.

SCALE

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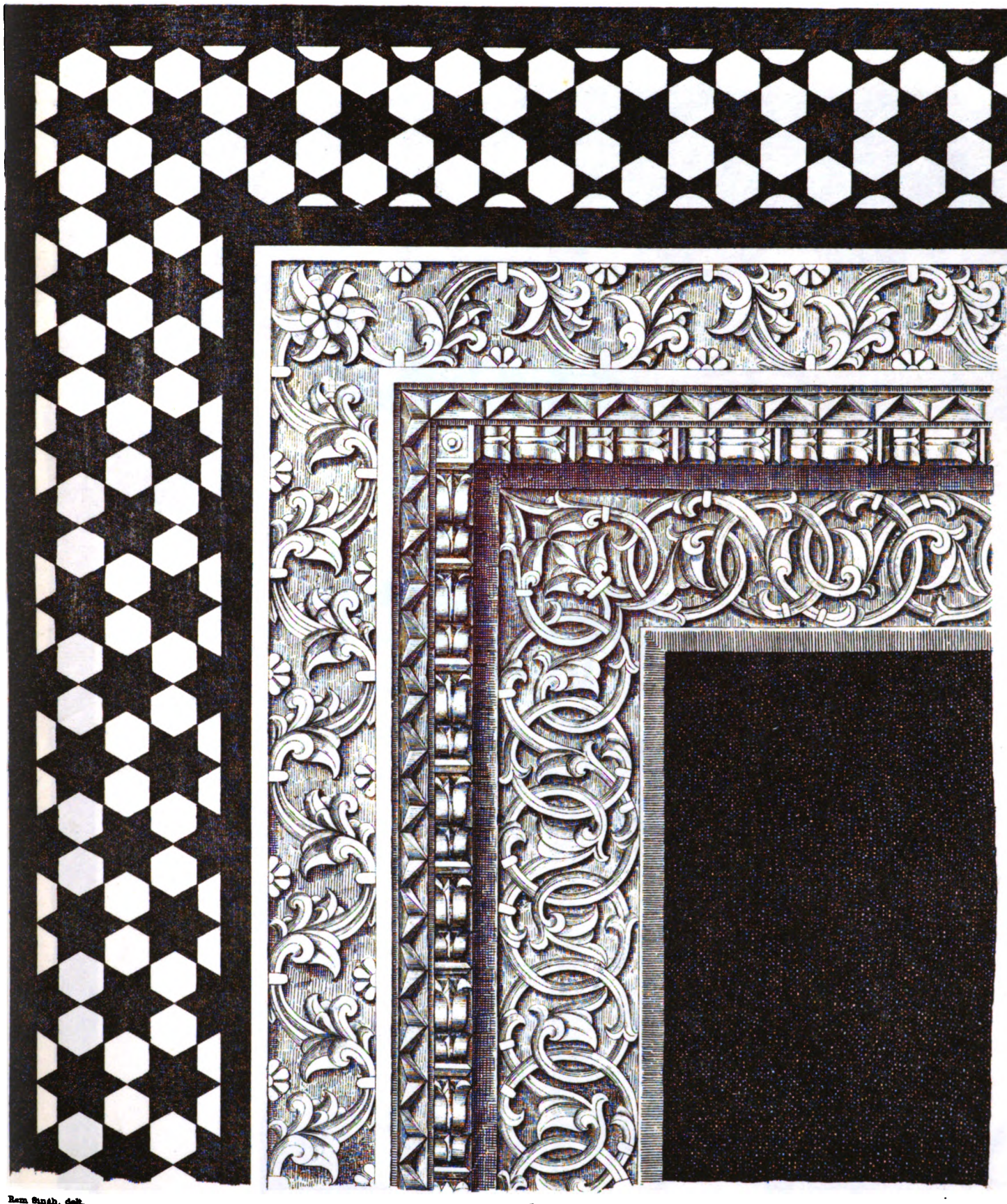
DETAIL OF CARVED ARCHITRAVE IN STONE AROUND DOORWAY BENEATH THE PORCH, NORTH FAÇADE.



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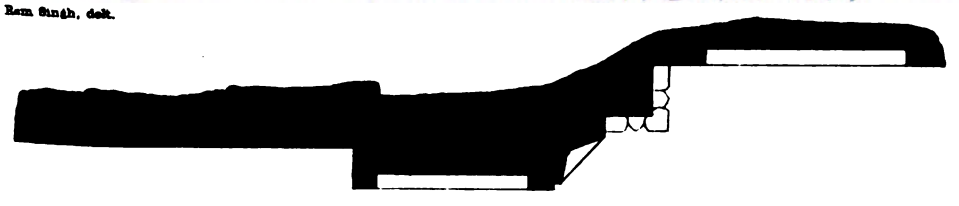

PLAN OF ARCHITRAVE.

SCALE

Archæological Survey of India, N. W. P. Circle, 1904

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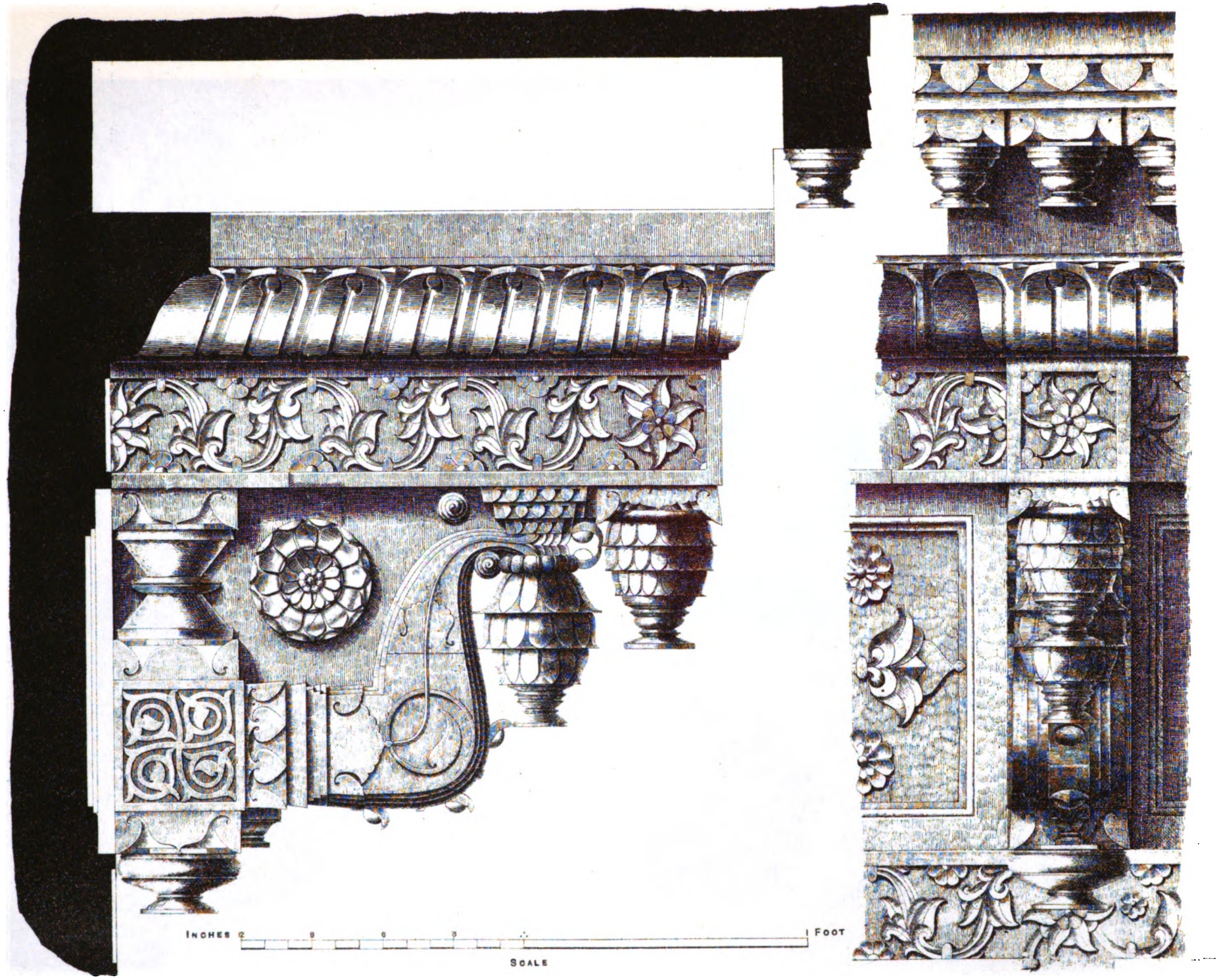

Fasul ud din I, delt.

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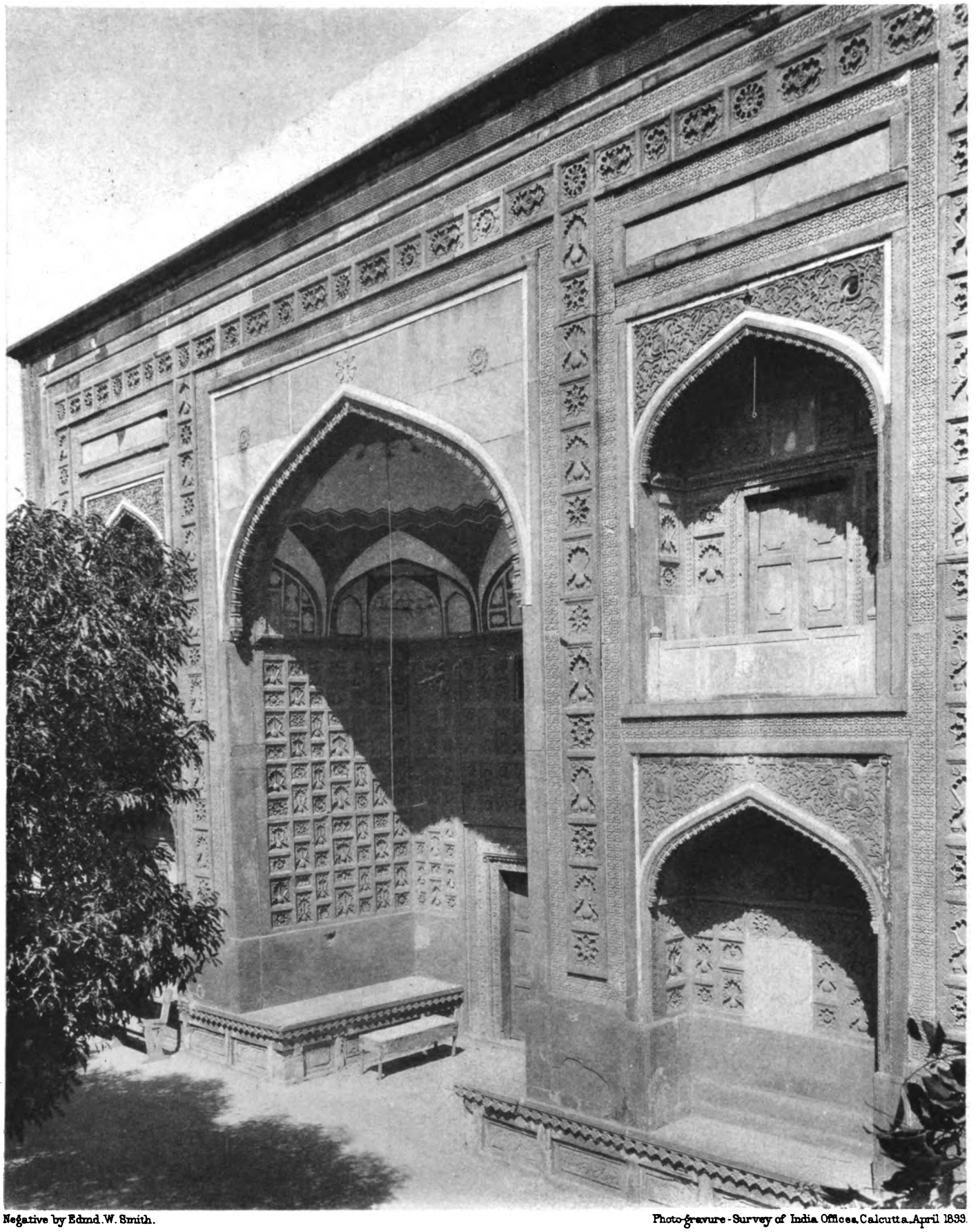

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SIKANDRA. AGRA: THE SURAJ-BHAN-KA-BÂGH, THE SOUTH FAÇADE.

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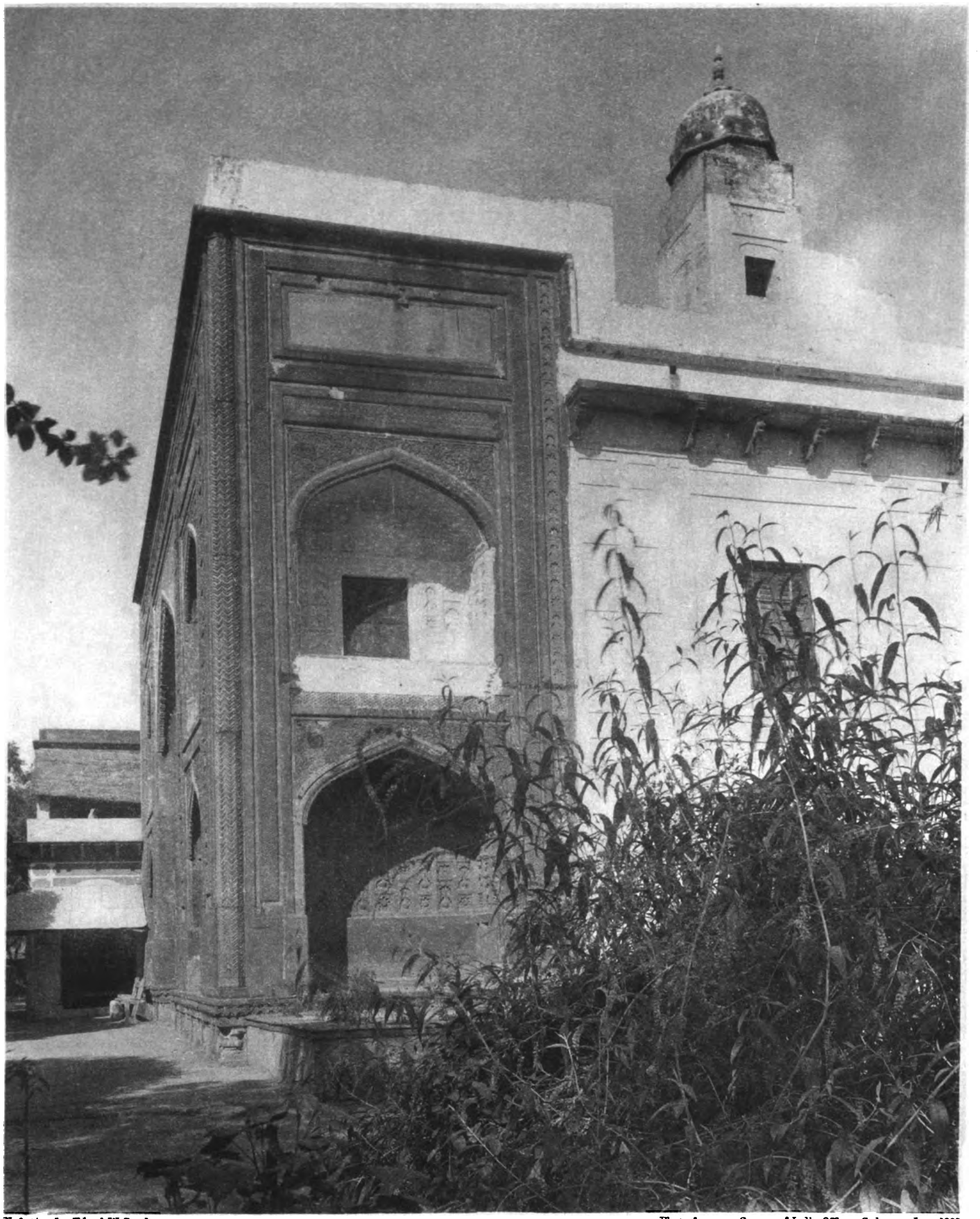

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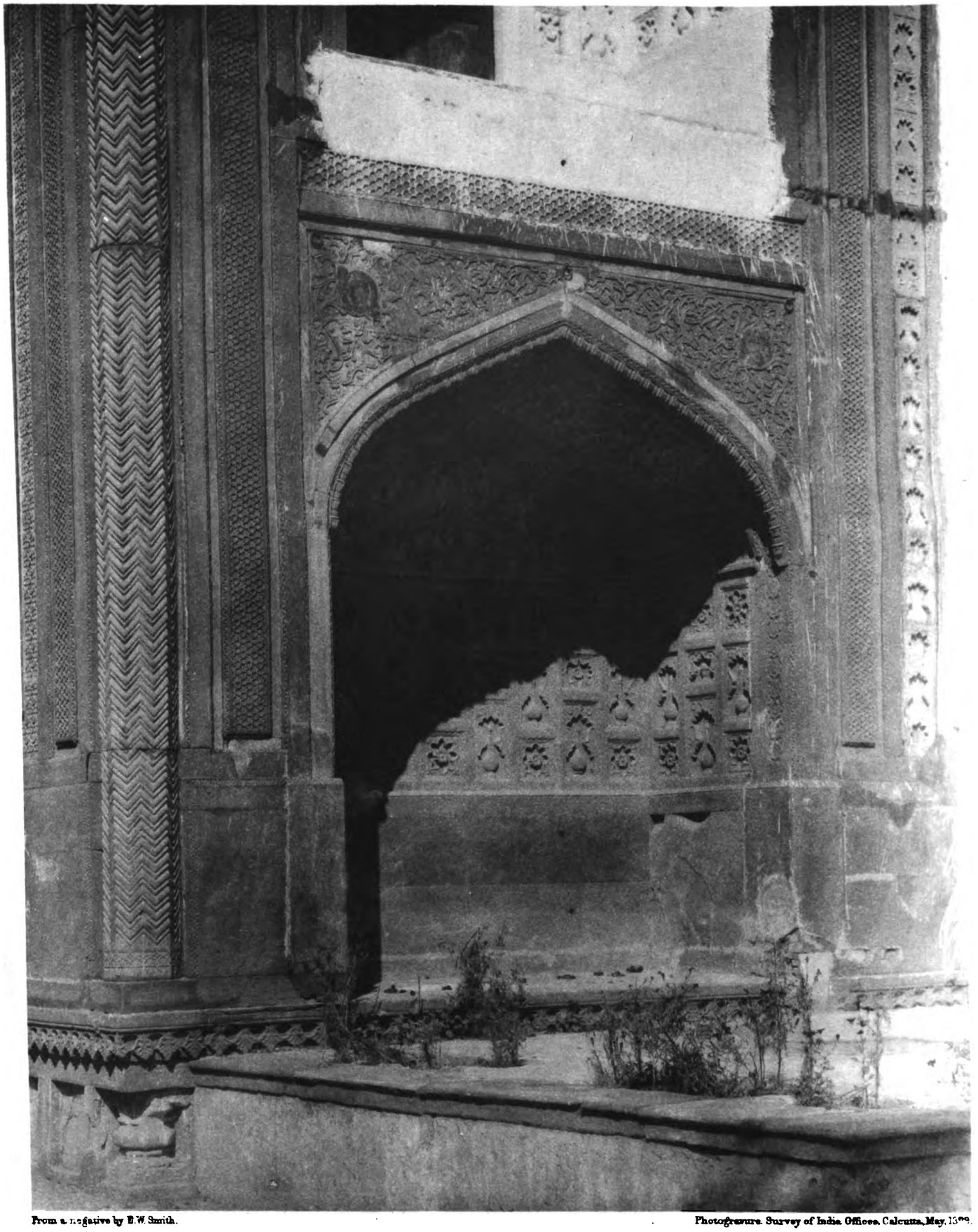

From a negative by E.W. Smith. Photogravure. Survey of India Offices, Calcutta, May. 1899.

SIKANDRA, AGRA.—THE SURAJ BHAN-KA-BAGH.
DETAIL OF ALCOVE ON THE GROUND FLOOR, EAST FAÇADE.

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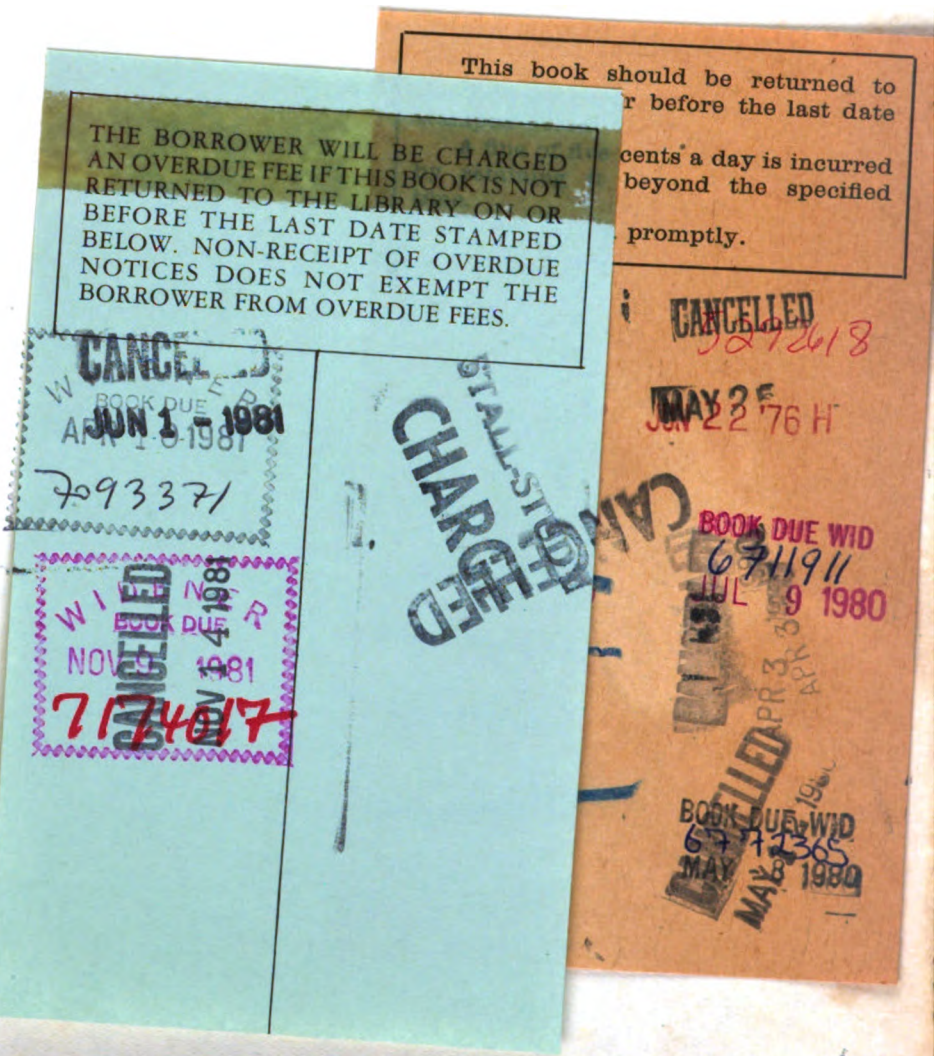

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Moghul colour decoration of Agra:
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ARCHÆOLOGICAL SURVEY OF INDIA

MOGHUL COLOUR DECORATION

OF

AGRA:

DESCRIBED AND ILLUSTRATED

BY

EDMUND W. SMITH, M.R.A.S.,

ARCHÆOLOGICAL SURVEYOR, NORTH-WESTERN PROVINCES AND OUDH.

PART I.

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